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NATUURLIJKE HISTORIE
LEIDEN

**MICROLEPIDOPTERA
OF NEW GUINEA**
RESULTS OF THE THIRD ARCHBOLD EXPEDITION
(AMERICAN—NETHERLANDS INDIAN EXPEDITION 1938—1939)

PART IV

BY

A. DIAKONOFF

Rijksmuseum van Natuurlijke Historie, Leiden

(WITH TEXT FIGURES 552—719)

VERHANDELINGEN DER KONINKLIJKE NEDERLANDSE
AKADEMIE VAN WETENSCHAPPEN, AFD. NATUURKUNDE

TWEEDE REEKS, DEEL L, No. 1.

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AMSTERDAM

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The present paper is the fourth part of the report on the Microlepidoptera of the Third Archbold Expedition to the Netherlands New Guinea, 1938—1939. The previous parts were published in no. 1, pp. 1—167, 1952, no. 3, pp. 1—167, 1953, and no. 4, pp. 1—164, 1954, of vol. XL of these *Verhandelingen*.

In the present part are given description and records of the Gelechiidae, Cosmopterygidae, Scaeosophidae, Xyloryetidae, Stenomidae, Oecophoridae, Orneodidae and Aegriidae. 15 genera, 119 species and 7 subspecies are described as new.

GELECHIIDAE

This extensive family is rather sparsely represented in the present collection, as the greater percentage is formed by the species of two genera only, viz., *Crocantbes* and *Lecithocera*. The first genus is almost exclusively confined to Australia and New Guinea and has acquired in each country rich, and independent development. From this we may conclude that, if *Crocantbes* is of Australian origin, and invaded the Papuan region from there, this must have taken place not very recently.

The second genus, *Lecithocera*, has an almost cosmopolitan distribution, but is possibly of Indian origin, from which country it might have invaded New Guinea (and also Australia).

Lecithocera is a typical inhabitant of forests, where it flies in shadowy places in the dark, as well as in the daytime. Although nineteen species are recorded below, all of them apparently new, we would expect a still larger number of species from the boundless region of forests of Central New Guinea, which have been explored by the Expedition, and especially from the Moss Forest Camp. The explanation of this limited number of species collected probably lays in the fact that semi-diurnal species are less easily attracted by light traps—by which method the greater part of the present material has been collected—than true nocturnal species. Further collecting will without doubt add many more species of the genus to the present list.

Key to the Papuan genera of the Gelechiidae

1. Fore wing with vein 7 to termen or apex, or 7 or 8 or 9 absent . . .	2
Fore wing with vein 7 to costa, 7-9 present ¹⁾	21
2. Antenna 1 or over 1	3
Antenna not over $\frac{5}{6}$	9
3. Hind wing with veins 3 and 4 remote	4
Hind wing with veins 3 and 4 connate, stalked or coincident.	5

¹⁾ Only in *Merocrates* vein 9 absent.

4. Hind wing with veins 3 and 4 widely remote, parallel. *Telephata* MEYRICK
Hind wing with veins 3 and 4 connate, stalked or coincident ¹⁾.
. *Lecithocera* HERRICH—SCHÄFFER (part)
5. Fore wing with vein 3 present 6
Fore wing with vein 3 absent 7
6. Fore wing with neurulation much distorted, basal area expanded, cell narrow,
veins 9—11 from near end of cell; hind wing with costal area expanded .
. *Scacostrepta* MEYRICK
Neurulation in both wings normal . . . *Lecithocera* HERRICH—SCHÄFFER(part)
7. Antenna in both sexes scaled above throughout . . . *Diascepsis* DURRANT ²⁾
Antenna ciliated or simple 8
8. Fore wing with vein 7 absent *Crocantbes* MEYRICK
Fore wing with vein 7 present *Sphenocrates* MEYRICK
9. Fore wing with veins 3 and 4 coincident *Thiotricha* MEYRICK
Fore wing with veins 3 and 4 not coincident 10
10. Hind wing with veins 6 and 7 remote at origin, nearly parallel. 11
Hind wing with veins 6 and 7 approximated, stalked or coincident 12
11. Fore wing with all veins present *Neolechia* DIAKONOFF
Fore wing with veins 7 and 9 absent. *Colobates* MEYRICK
12. Fore wing with vein 7 absent 13
Fore wing with vein 7 present 14
13. Fore wing with veins 2 and 3 separate; median segment of palpus in male
not expanded posteriorly with loose scales. *Hierangela* MEYRICK
Fore wing with veins 2 and 3 connate or stalked; median segment of palpus
in male expanded posteriorly with loose scales. *Anaptilora* MEYRICK
14. Fore wing with veins 2 and 3 remote. *Amphigenes* MEYRICK
Fore wing with veins 2 and 3 connate, stalked or coincident, or 3 and 4 out
of 2 15
15. Fore wing with veins 2 and 3 connate, stalked or coincident, 4 separate 16
Fore wing with veins 3 and 4 out of 2. 20
16. Palpus with terminal segment thickened with somewhat rough scales, at least
at base. *Atasthalistis* MEYRICK
Palpus with terminal segment not thickened with rough scales 17
17. Palpus with median segment roughened or tufted beneath. *Gaesa* WALKER
Palpus with median segment clothed with appressed scales. 18
18. Hind wing with cubital pecten *Hylograptis* MEYRICK
Hind wing without cubital pecten 19
19. Palpus very long, terminal segment about 1; antenna $\frac{4}{5}$; hind wing with
termen sinuate *Brachmia* HÜBNER
Palpus moderate, terminal segment $\frac{1}{2}$; antennae $\frac{3}{4}$; hind wing with termen
not sinuate *Limenarchis* MEYRICK
20. Terminal segment of palpus in male much longer than median, almost as
broad throughout, compressed; hind wing with veins 3 and 4 connate, 5
approximated. *Platynacha* MEYRICK
Terminal segment of palpus moderate, about as long as median; hind wing
with veins 3 and 4 short-stalked, 5 parallel *Mencratisis* MEYRICK

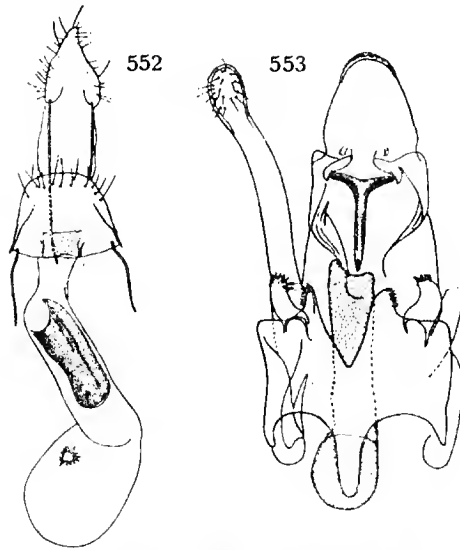
¹⁾ In *Lecithocera nitens* spec. nov., veins 3 and 4 in the hind wing are remote. This species can be distinguished from the genus *Telephata* by less roughly haired median segment of palpi and by not stout neither compressed antennae in the male.

²⁾ The genus *Diascepsis* DURRANT, 1915, is included tentatively, as it may not belong to *Gelechiidae* at all. We hope to return to this matter elsewhere.

21. Antenna 1 or over 1 22
 Antenna under 1 26
22. Hind wing with veins 6 and 7 nearly approximated at base
 *Lysipatha* MEYRICK
 Hind wing with veins 6 and 7 stalked 23
23. Hind wing with vein 4 absent *Asmenistis* MEYRICK
 Hind wing with all veins present. 24
24. Fore wing with veins 8 and 9 out of 7 *Periphorectis* MEYRICK
 Fore wing with vein 9 separate 25
25. Hind wing with veins 4 and 5 out of 3 *Hyptiastis* MEYRICK
 Hind wing with veins 3 and 4 stalked, 5 remote . . *Homotima* gen. nov.
26. Hind wing with vein 3 absent 27
 Hind wing with vein 3 present 28
27. Hind wing with vein 4 absent *Gonaepa* WALKER
 Hind wing with vein 4 present *Prodosiarecha* MEYRICK
28. Hind wing with veins 3 and 4 separate. 29
 Hind wing with veins 3 and 4 connate or stalked 31
29. Terminal segment of palpus with posterior scale-projection of loose scales.
 *Hypatima* HÜBNER
 Terminal segment of palpus without such projection 30
30. Hind wing with apex strongly produced, termen emarginate
 *Aristotelia* HÜBNER
 Hind wing with apex little produced, termen slightly sinuate
 *Anarsia* ZELLER (part)
31. Fore wing with vein 9 absent *Merochrates* MEYRICK
 Fore wing with vein 9 present 32
32. Median segment of palpus beneath with an apical tuft or with roughly
 projecting scales 33
 Median segment of palpus beneath with appressed scales or more or less
 roughened but without roughly projecting scales or tuft 35
33. Fore wing with veins 2 and 3 stalked from angle . . *Dichomeris* HÜBNER
 Fore wing with veins 2 and 3 separate 34
34. Hind wing with veins 3 and 4 connate; fore wing without raised scale-tufts;
 terminal segment of palpus in male very short or concealed
 *Anarsia* ZELLER (part)
 Hind wing with veins 3 and 4 stalked; fore wing with small raised scale-tufts;
 terminal segment of palpus in male as long as median *Phricogenes* MEYRICK
35. Hind wing with cubital pecten *Catelaphris* MEYRICK
 Hind wing without cubital pecten 36
36. Hind wing with veins 6 and 7 stalked 37
 Hind wing with veins 6 and 7 separate. 38
37. Fore wing with veins 2 and 3 stalked *Hemiarcha* MEYRICK
 Fore wing with veins 2 and 3 remote *Ennmetroplysis* gen. nov.
38. Palpus more or less thickened with appressed scales; hind wing with vein
 5 rather approximated to 4, 6 and 7 nearly parallel. *Protolechia* MEYRICK
 Palpus slender, smooth; hind wing with vein 5 straight, parallel, 6 and 7 rather
 approximated towards base. *Crypsimaga* MEYRICK

Aristotelia HÜBNER, 1826

Aristotelia HÜBNER, 1826, Verz. bek. Schmett., p. 424. MEYRICK, Gener. Ins., fasc. 184, pp. 40-41, 1925. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 24, 1929; etc. etc.



Genitalia of Gelechiidae. Fig. 552: *Emmetrophysis lanceolata* spec. nov., female.
Fig. 553: *Homotima purpurata* spec. nov., male.

- Microsetia* STEPHENS, 1834, Ill. Brit. Ent. Haust., vol. 4, pp. 263—264.
Nomia CLEMENS, 1860, Proc. Acad. Nat. Sci. Philad., 1860, p. 167. .
Chrysopora CLEMENS, 1860, *ibidem*, p. 362.
Nannodia HEINEMANN, 1870, Schmett. Deutschl., vol. 2, part 1, p. 280.
Argyristis HEINEMANN, 1870, *ibidem*, p. 283.
Apodia HEINEMANN, 1870, *ibidem*, p. 286.
Ptocheuusa HEINEMANN, 1870, *ibidem*, p. 288.
Ergatis HEINEMANN, 1870, *ibidem*, p. 295.
Doryphora HEINEMANN, 1870, *ibidem*, p. 298.
Monochroa HEINEMANN, 1870, *ibidem*, p. 308.
Lamprotes HEINEMANN, 1870, *ibidem*, p. 309.
Euchrysa ZELLER, 1873, Verh. Zool.-Bot. Ges. Wien, vol. 23, p. 282.
Xystophora HEINEMANN, 1876, Schmett. Deutschl., vol. 2, part 2, pl., p. 6.
Syneuntis WALLENGREN, 1881, Ent. Tidskr., vol. 2, p. 95.
Isochasta MEYRICK, 1886, Trans. N. Zeal. Inst., vol. 18, p. 163.
Doryphorella COCKERELL, 1888, Entomologist, vol. 21, p. 163.
Eucatoptus WALSINGHAM, 1897, Proc. Zool. Soc. Lond. 1897, p. 69.
Anaphaula WALSINGHAM, 1904, Ent. Monthl. Mag., vol. 40, p. 268.
Parapodia JOANNIS, 1912, Bull. Soc. Ent. Fr., 1912, p. 305.

Key to the Papuan species of *Aristotelia*

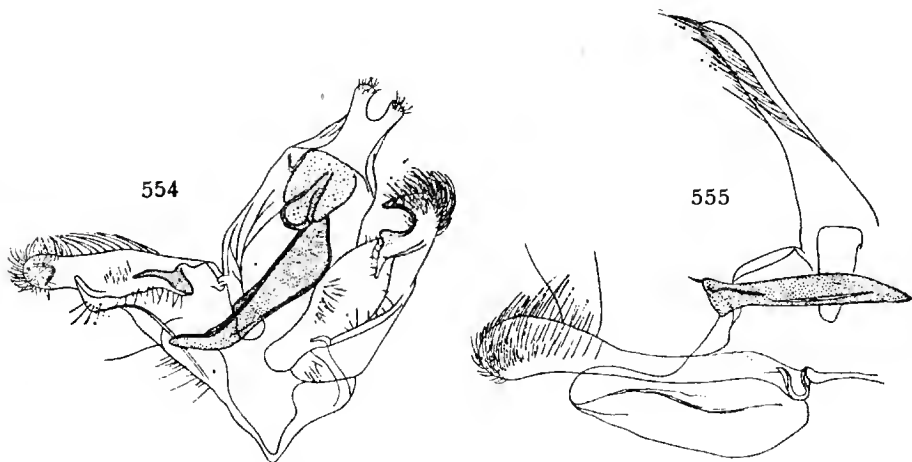
1. Light tawny, marked with fuscous-brown *schistopa* spec. nov.
 Ochreous-white, marked with dark fuscous. *triclasmata* spec. nov.

Aristotelia schistopa spec. nov. (fig. 554)

σχιστός = split, ὄφ = eye

♂ 24 mm. Head pale ochreous, sides of vertex tinged tawny, behind the eyes light reddish-brown. Antenna slightly thickened, tawny-ochreous,

infuscated. Palpus pale ochreous, median segment thickened, roughish below throughout, suffused with fuscous except its apex, less so along upper edge, terminal segment slender, under 1, with the extreme tip mixed with dark fuscous. Thorax pale ochreous, tinged tawny laterally. Abdomen pale ochreous, slightly infuscated. Legs pale ochreous, more or less suffused with brown except below: median and posterior tibia densely long-haired above; posterior tibia outwardly suffused with brown, spurs dark fuscous. Fore wing broad-lanceolate, dilated at $\frac{1}{3}$, costa moderately curved anteriorly, somewhat impressed in middle, straight beyond this, gradually curved towards apex, apex pointed, termen slightly rounded, extremely oblique. Pale golden-ochreous, evenly suffused with light tawny, markings suffused, dark fuscous-brown. An ill-defined oblique transverse patch of fulvous-brown suffusion from base of costa to below the middle of the wing; an ill-defined outwardly oblique subtriangular deep coffee-brown spot on costa before the middle, with the top reaching to before the centre of the wing; an elongate dark fuscous blotch in the middle of the wing, occupying about second fifth of its length, terminated below by the fold, touching the preceding mark; an indefinite coffee-brown suffusion occupying the posterior fourth of the costa to the apex, reaching halfway across the wing; a moderate longitudinal straight streak of coarse white irroration along the middle of the disc from $\frac{2}{5}$ to $\frac{4}{5}$, mixed with brown anteriorly and marked with two irregular fuscous-black dots: at its middle and before its posterior extremity, respectively, the ultimate dot largest, elongate; an ill-defined small pale ochreous spot on $\frac{5}{6}$ of the costa extending over the cilia; a patch of the same colour mixed with tawny in the tornus. Cilia pale golden-ochreous, infuscated except along the base, with a broad cloudy interrupted subbasal band, apical third of the cilia fuscous, costal cilia dark fuscous. Hind wing silvery-ochreous-white, somewhat



Genitalia of Gelechiidae. Fig. 554: *Aristotelia schistopa* spec. nov., male. Fig. 555: *Thiotricha chionochrusa* spec. nov., male.

infuscated in the apex; termen twice excavate. Cilia light golden-ochreous, infuscated, except along their base, more so towards and in the apex.

Tegumen strong, erect. Uncus bilobed, with the tops finely bristled. Socii absent. Gnathos, a strong pending plate, formed by triangular lateral sclerites and curved, spoon-like median projection. Valva with triangular base, strongly narrowed, cucullus hooked, bristly; saccus moderate, ending in a curved, spoon-like process; a strong crochet in the disc of the valva towards the costa with a dilated base, edged below and followed by groups of bristles. Aedoeagus strong, triangularly dilated towards base, its top curved. Cornuti not perceptible. (Slide no. 1117 D, type.)

Sigi Camp, 1500 m, February 18, 1939. One specimen. The genitalia approach those of *Aristotelia (Ptocheuusa) inopella* ZELLER, from Europe, figured by PIERCE (*Genit. Brit. Tin.*, p. 5, pl. 3, 1935).

***Aristotelia triclasma* spec. nov.**

τρι = three, *κλάσμα* = lump

♂ 18 mm. Head, thorax glossy ochreous-whitish. Antenna ochreous-whitish with three small distant blackish rings before the apex. Palpus with the median segment slightly thickened with appressed scales; ochreous-whitish, the median segment and the basal half of the terminal above suffused with fuscous-grey. (Abdomen missing.) Legs ochreous-white, anterior leg blackish above, median femur and tibia infuscated above. Fore wing lanceolate, costa gently curved towards the base, apex pointed, termen hardly rounded, extremely oblique, tornus indefinite, base of the dorsum rounded-prominent. Ochreous-white with silvery gloss. Base of the costa narrowly suffused with blackish-fuscous; markings dark fuscous. An elongate-subtriangular longitudinal spot below the costa just before the middle, with its horizontal edges rather well-defined, straight, vertical irregular; a smaller elongate-ovate spot below the above mentioned spot, in fold; a paler elongate-subovate spot above $\frac{1}{5}$ of the dorsum, strongly inwardly oblique, reaching above to the fold at $\frac{1}{4}$ of the wing length; a minute longitudinal dash on the middle of the closing vein; posterior half of the costa narrowly slightly infuscated, its apical sixth more deeply tinged greyish-fuscous; faint greyish terminal marks on the veins; a very faint pale tawny-fuscous suffusion forming a small patch on $\frac{2}{3}$ of the costa and extending along the dorsum as far as vein 1b. Cilia pale ochreous, slightly infuscated opposite the apex. Hind wing whitish with silvery gloss, cilia pale ochreous.

Mist Camp, 1800 m, January 15, 1939. One specimen.

***Emmetrophysis* gen. nov. (fig. 556)**

ἐμμετρος = regular, *φύσις* = nature

Head with appressed scales, side-tufts slightly spreading. Ocellus

posterior. Proboscis short. Antenna $\frac{3}{4}$, in the female minutely pubescent, scape elongate, somewhat clavate, without pecten. Labial palpus long, curved, ascending, median segment thickened with appressed scales, roughish beneath, terminal segment under 1, slightly thickened, smooth, acute. Maxillary palpus vestigial. Posterior tibia with fine long hairs above. Fore wing ovate-lanceolate, pointed; 1b furcate at base, 2 from $\frac{4}{5}$, 3 from angle, 3—5 slightly approximated and equidistant, 6 distant from 5, 7 and 8 long-stalked, 7 to costa, 9 approximated, 11 from middle. Hind

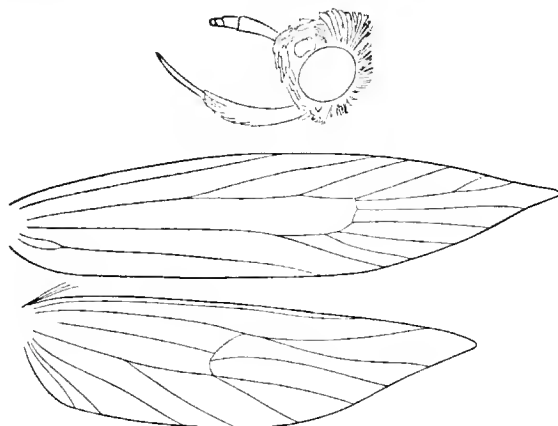


Fig. 556: *Emmetrophysis lanceolata* gen. nov., spec. nov., male, wing neuration and head.

wing 1, elongate-subtrapezoid, termen gently sinuate above, broadly rounded beneath, without cubital pecten, cilia over 1; 2 from beyond middle, 3 and 4 connate from angle, 5 remote, strongly curved downward towards base, out of lower third of cell, 6 and 7 short-stalked.

Genotype *Emmetrophysis lanceolata*, spec. nov., male.

Possibly correlated with *Anisoplaca* MEYRICK, 1886, and only structurally with *Phricogenes* MEYRICK, 1931, differing from both by the shape of the palpi and by the stalked veins 6 and 7 in the hind wing.

***Emmetrophysis lanceolata* spec. nov. (figs. 552, 556)**

♀ 12 mm. Head and thorax fuscous with a golden gloss. Antenna dark fuscous. Palpus fuscous, terminal segment dark fuscous. Abdomen pale ochreous. Legs fuscous, anterior leg suffused with dark fuscous, posterior tibia and tarsus fuscous-whitish, with spurs dark fuscous. Fore wing moderately broad, regularly lanceolate, broadest in middle, margins gradually and gently curved, apex pointed. Glossy whitish-fuscous, irrorated with light fuscous-brown, on the basal third with darker fuscous, this area faintly purplish-tinged. Cilia pale fuscous, opposite the apex irrorated with darker fuscous. Hind wing fuscous-whitish with a silvery gloss, cilia pale fuscous.

Ostium moderate. Limen, a subtriangular plate with a moderate thickening at each side, the lower extremity rounded, the upper rim straight. Ductus bursae broad, short. Cestum, a broad semitubular plate. Bursa copulatrix ovoid. Signum stellate, situated on a rounded plate. (Slide no. 1116 D, type.)

Scree Valley Camp, 3800 m, September 16, 1938. One specimen.

Thiotricha MEYRICK, 1886

Thiotricha MEYRICK, 1886, Trans. N. Zeal. Inst., vol. 18, p. 164. Journ. Bomb. Nat. Hist. Soc., vol. 18, p. 439, 1908. Gener. Ins., fasc. 184, p. 101, 1925. Rev. Handb., p. 638, 1928. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 221, 1929. GAEDE, Lepid. Catal., part 79, p. 42, 1937.

Mystax CARADJA, 1920, Iris, vol. 34, p. 136.

Key to the Papuan species of *Thiotricha*

1. A jet-black dot in apex *chionochrysa* spec. nov.
Grey transverse fasciae at middle and towards apex. . . *nephelodesma* MEYRICK

***Thiotricha chionochrysa* spec. nov. (fig. 555)**

χιών = snow, *χρυσός* = gold

♂ 11 mm. Head snow-white, shining pale golden. Antenna white, towards the apex becoming suffused with dark grey. Palpus white, terminal segment suffused with greyish. Thorax pale ochreous, suffused with light greyish-fuscous except along sides, tegula white with a golden shine. Abdomen ochreous-white, glossy, anal tuft dull pale ochreous. Legs fuscous-whitish, anterior and median tibia and tarsus infuscated above, posterior tibia with a suffused subapical band and apical spurs, grey. Fore wing lanceolate, moderately pointed. Shining whitish-golden, becoming deeper golden posteriorly, especially along the posterior fifth of the costa; a narrow dark grey streak along the base of the costa; faint greyish elongate patches, imperceptible in certain lights, above dorsum at $\frac{3}{4}$ of wing, and along the both margins of the posterior fifth of the wing to before the apex; apex pure white with a round jet-black dot. Cilia pale golden, along the dorsum becoming whitish anteriorly, along the costa and around the apex with greyish tips.

Tegumen weak, finely haired along its edge. Valva narrow, cucullus dilated and rounded. Vinculum submembranous, with a broad saccus, laterally with a curved acute process. Aedoeagus strongly sclerotized, rather short, top trumpet-like. Cornutus, a sinuate spine. (Slide no. 1120 D, type.)

Baliem Camp, 1700 m, December 9, 1938. One specimen. Belongs to the *T. glenias* group. The genitalia of the unique specimen are partially damaged.

Atasthalistis MEYRICK, 1886

Atasthalistis MEYRICK, 1886. Trans. Ent. Soc. Lond., vol. 1886, p. 279. Gener. Ins., fasc. 184, p. 136, 1925. FLETCHER, Mem. Agr. Ind., Ent., vol. 11, p. 26, 1929. GAEDE, Lepid. Catal., part 79, p. 374, 1937.

Croesopola MEYRICK, 1904, Proc. Linn. Soc. N.S. Wales, vol. 29, p. 410.

Key to the Papuan species of *Atasthalistis*

1. Ground colour green *ochreoviridella* PAGENSTECHER
Ground colour not green. 2
2. Ground colour dark purplish-fuscous; hind wing blackish, a broad orange terminal fascia to below middle of termen *gorgopa* MEYRICK
Ground colour black 3
3. A narrow white subcostal streak *pyrhocosma* MEYRICK
Four white subcostal dots *gnophrina* FELDER

Atasthalistis gnophrina (FELDER, 1872)

Ethmia? gnophrina FELDER, 1872, Reis. Novara, pl. 139, fig. 38.

Atasthalistis gnophrina, MEYRICK, Trans. Ent. Soc. Lond., vol. 1886, p. 279, 1886. Gener. Ins., fasc. 184, p. 136, pl. 3, fig. 74, 1925. GAEDE, Lepid. Catal., fasc. 79, p. 374, 1937.

Distribution: Moluecas: Ternate.

Bernhard Camp, 50 m, August 29, 1938 (J. OLT Hof). One female.

Prodosiarcha MEYRICK, 1904

Prodosiarcha MEYRICK, 1904, Proc. Linn. Soc. N.S. Wales, vol. 29, p. 330. Gener. Ins., fasc. 184, p. 146, 1925. FLETCHER, Mem. Agr. Ind., Ent., vol. 11, p. 184, 1929. GAEDE, Lepid. Catal., part 79, p. 389, 1937.

Prodosiarcha catadamanta spec. nov.

κατά = below, *ἄδαμας* = steel

♂ 16 mm. Head fuscous-grey, face paler, side-tufts of vertex ochreous. Antenna bronze, suffused with blackish towards the base above. Palpi diverging, median segment rather smooth below, terminal slightly over 1; yellow, terminal segment blackish, suffused with yellow towards the base. Thorax dark fuscous, posterior edge narrow, lateral edges of the tegula and two moderate attenuated longitudinal streaks, yellowish; pectus whitish, mixed with grey. (Abdomen missing.) Legs yellow, anterior and median femur more or less mixed with grey (posterior legs broken). Fore wing narrow, elongate-subovate, little dilated; broadest at $\frac{3}{4}$, costa little curved at the base, straight in the middle, moderately curved before the apex, apex rounded, termen rounded, oblique. Purplish-fuscous, markings light yellow, suffused with deeper yellow posteriorly. Base with some

scattered ochraceous-olive scales forming a spot above and one below the middle; a transverse curved outwardly concave yellow patch from below $\frac{1}{5}$ of the costa, reaching $\frac{2}{3}$ across the wing, separated in three elongate-ovate spots by two fine lines of the ground colour: the upper spot outwardly oblique, the median spot small, longitudinal, the lower spot largest, parallel to the fold, slightly extended along the fold anteriorly; a longitudinal streak occupying somewhat less than $\frac{1}{4}$ of the wing breadth, anterior half slightly above the middle, posterior along the middle of wing, running from $\frac{2}{5}$ of the disc to the termen, hardly sinuate, with the posterior half or third bifid, forming two narrow attenuated lines along veins 5 and 6, respectively; a minute yellow line along posterior half of vein 7; a somewhat undulate narrow subterminal streak, parallel to the edge of the wing, from vein 7 to vein 3, terminating three longitudinal lines mentioned above; an elongate wedge-shaped yellow spot along fold from the middle of the wing, with its base obliquely truncate, with the acute top reaching distad to just above $\frac{1}{4}$ of the dorsum. Cilia fuscous-purple, posterior half snow-white. Hind wing elongate-semiovate, about 1, termen sinuate; deep orange-yellow, markings fuscous-purple; the costal third fuscous-purple, the lower edge of this colour straight, with a small rounded projection at $\frac{3}{5}$, a moderate streak from the base with its lower edge running along the fold, abruptly narrowed beyond the middle, thence running above the fold, to about middle of the termen, at the base moderately dilated and sending off an attenuated subterminal streak, merging in the dark costal area; a few orange-yellow scales before the apex. Cilia (imperfect) fuscous-purple, posterior $\frac{2}{3}$ white along the termen from below the apex to the middle. Underside of the hind wing orange, a black spot on the base of the costa, apex narrowly black, veins and the subterminal streak (as in the fore wing) black, a blackish irroration at $\frac{2}{3}$ of the costa; a small spot on the costa beyond the base and two thick longitudinal streaks not reaching the termen, brilliantly shining metallic blue-lead, first streak from beyond the base along vein 6, with the apex curved upward, second one from the base, somewhat sinuate in the middle, tolerably corresponding with the plical streak of the upper side.

Hollandia, sea level, July, 1938. One specimen. An elegant, slender species with markedly coloured under side of the hind wing. In spite of slight discrepancies with the description of *Prodosiarcha*, viz., a rather smooth lower edge of the median segment of the labial palpi, a long terminal segment (somewhat over 1), and the sinuate termen in the hind wing, we place this insect in the present genus, pending further evidence.

Hemiarcha MEYRICK, 1904

Hemiarcha MEYRICK, 1904, Proc. Linn. Soc. N.S. Wales, vol. 29, p. 331. Gener. Ins., fasc. 184, pp. 146–147, 1925. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 106, 1929. GAEDE, Lepid. Catal., part 79, p. 390, 1937.

Hemiarcha melanogastra spec. nov. (figs. 561, 562, 563)

μέλας = black, γαστήρ = abdomen

♂ 19 mm. Head and thorax (damaged) white, vertex slightly mixed with fuscous, shoulder suffused with ferruginous. Antenna white, faintly ringed with brownish, base of the flagellum and the scape brownish below. Palpus whitish, basal segment with the apical half dark brown, median segment with a triangular projecting tuft at the apex below: dark brown, a subbasal ring and the apex, white; terminal segment with a narrow subbasal dark brown ring, posterior $\frac{3}{4}$ pale brownish, with the upper edge narrowly brown, with two faint narrow whitish rings. Abdomen brownish-black, anal tuft whitish-ochreous, venter suffusedly whitish-ochreous. Legs blackish-fuscous, posterior coxa and the articulations of the tarsal segments, whitish-ochreous. Fore wing elongate-sublanceolate, moderately broad, hardly dilated, costa curved anteriorly, with an appressed thick truncate tuft of scales from the base to $\frac{1}{3}$, a much smaller second tuft in the middle, costa concave in the middle, concavity smooth, accentuated by roughish cilia along the posterior third of the costa, which is obliquely curved, with the apex somewhat projecting, pointed, termen rounded, oblique. White, costal tufts greyish-fuscous, becoming paler towards their apex which is white, along the costal edge tinged ferruginous; a narrow elongate-semiovate spot along the costal concavity, brownish, suffused with dark ferruginous, reaching from the middle to $\frac{2}{3}$ of the costa, with the lower edge irregular; an irregular equilateral triangular spot of cloudy brownish suffusion, coarsely dotted with blackish-fuscous, extending along the costa from $\frac{4}{5}$ to before the apex; a small spot of blackish irroration in the middle of the disc just beyond the base; irregular transverse strigulae of fuscous irroration along about the median half of the wing, running outwardly from below the costa to the middle of the disc, thence ill-defined, inwardly oblique to the fold, outwardly oblique from the fold to the dorsum, one of these strigulae forming a small suffusion on the middle of the dorsum; a moderate, suffused brownish marginal streak from the subapical costal patch to the apex and along the termen to the tornus, moderately narrowed below; a few dark fuscous scales scattered below the middle of the costa, obscuring transverse strigulae. Cilia black, slightly mixed with white, with the base white. Hind wing glossy fuscous-grey, cilia grey with the base narrowly whitish.

(Genitalia damaged and broken to parts.) Tegmen elongate. Uneus moderate, clavate, bristled ventrally at the base. Gnathos with very short arms and a long, curved hook. Valva narrow, cucullus dilated, subrectangular, harpe, a small bristled knob, sacculus indefinite, a series of large but weakly sclerotized bristles. Aedoeagus curved, slender, with a bulbate base. (Slide no. 963 D, type.)

Mist Camp, 1800 m, January 12, 1939. One specimen.

Anarsia ZELLER, 1839

Anarsia ZELLER, 1839, Isis, p. 190. HERRICH-SCHÄFFER, Schmett. Eur., vol. 5, p. 153, 1852. HEINEMANN, Schmett. Deutschl., vol. 2, part 1, p. 347, 1870. CHRISTOPH, Mem. Roman., vol. 2, p. 162, 1885. WALSINGHAM, Trans. Ent. Soc. Lond., 1891, p. 111, 1891. MEYRICK, Handb. Brit. Lep., p. 609, 1895. STAUDINGER & REBEL, Catal. Pal. Lep., vol. 2, p. 161, 1901. BUSCK, Proc. U.S. Nat. Mus., vol. 25, p. 928, 1903. CROMBRUGGE, Microl. Belg., vol. 2, p. 38, 1906. SPULER, Schmett. Eur., vol. 2, p. 353, 1910. HAUDER, Micror. Ob. Österr., p. 193, 1913. CHRÉTIEN, Ann. Soc. Ent. Fr., 1915, p. 332. FRACKER, Illinois Biol. Monogr., vol. 2, nr. 1, 1915. JANSE, Checklist S. Afr. Heter., p. 185, 1917. CARADJA, Iris, vol. 34, p. 117, 1920. LARSEN, Ent. Meddel., vol. 17, p. 84, 1927. BENANDER, Sv. Insektf., vol. 11 (Gelech.), p. 52, 1928. MEYRICK, Gener. Ins., fasc. 184, p. 153, 1925. Rev. Handb., p. 643, 1928. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 13, 1929. BODENHEIMER, Schädlingf. Paläst., p. 235, 1930. HERING, Schmett. Mitt. Eur., p. 107, 1932. AMSEL, Zoogeogr., vol. 2, p. 126, 1933. PIERCE, Genit. Brit. Tin., p. 21, pl. 12, 1935. GAEDE, Lepid. Catal., part 79, p. 400, 1937.

Anarsia anisodonta spec. nov. (fig. 575)

ἄνισος = inequal, ὀδούς = tooth

♂ 16 mm. Head and antenna white. Palpus black, apex of the median segment slightly mixed with white, terminal segment aborted. Thorax white, apical third suffused with greyish, shoulder and a round spot on inner anterior angle of the tegula, black. Abdomen sordid white, venter greyish, sides suffused with black. Legs, anterior and median leg fuscous-blackish, basal half of the median tibia white above, tarsi white-ringed, posterior leg sordid white. Fore wing rather narrow, elongate-subovate broadest at $\frac{1}{4}$, costa curved anteriorly, tolerably straight posteriorly, apex subacute, termen moderately rounded, oblique. White, basal sixth of the costal edge black; a large antemedian dentoid-triangular black patch extended along the costa, from before $\frac{1}{4}$ to $\frac{3}{5}$, reaching more than $\frac{2}{3}$ across the wing, with the anterior edge moderately straight, considerably oblique, somewhat irregular, the posterior edge excavated along its median half, forming a moderate rectangular projection on the costa, and a small triangular one in the fold, top of the patch somewhat truncate; a small black somewhat elongate spot in the apex, another rectangular and larger spot on the termen below the apex, the former crowned with some three black scales; two small suffused grey spots on the costa at $\frac{1}{4}$, and well before the apex, respectively, extending over the cilia; ill-defined grey irroration or suffusion along and before the lower half of the termen, fainter one above the tornus; a small black dot halfway between the base and the costal patch, slightly above the middle of the wing; a minute black dot on $\frac{1}{4}$ of the dorsum; a faint greyish mark in the disc just beyond the cell: circular, connected by a vertical bar with the tornus, with its upper and lower extremities, and its anterior edge, mixed with a few black scales. Cilia grey with a whitish base, and a median row of cloudy dark dots, costal and tornal cilia white. Hind wing white, apical

third suffused with grey, cilia whitish touched with ochreous, towards the apex becoming suffused with grey.

Tegumen long, narrow, base little dilated, apex dilated, bilobed, bristled. Valvae asymmetrical, right narrow, left much broader, cucullus dilated, covered with peculiar, clavate, penicillate bristles; right sacculus simple, left with a short bristled knob and a long hooked crochet. Vinculum erect-triangular. Anellus, a broad slightly bristled plate, with a slit in the middle. Aedoeagus small, pistol-shaped, acute. (Slide no. 970 D, type.) Very much similar to the genitalia of the genotype, European *A. spartiella* SCHRANCK (PIERCE, *Gen. Brit. Tin.*, p. 21, pl. 12, 1935).

Sigi Camp, 1500 m, February 26, 1939. One specimen.

Homotima gen. nov. (fig. 557)

ὁμότιμος = equal in esteem

Head with smoothly appressed scales. Ocellus posterior. Proboscis developed. Antenna over 1, in female moderately thickened throughout with whorls of subappressed fine scales, appearing serrate, scape elongate, without pecten. Labial palpus very long, curved, ascending, with median segment exceeding base of the antenna, thickened with closely appressed

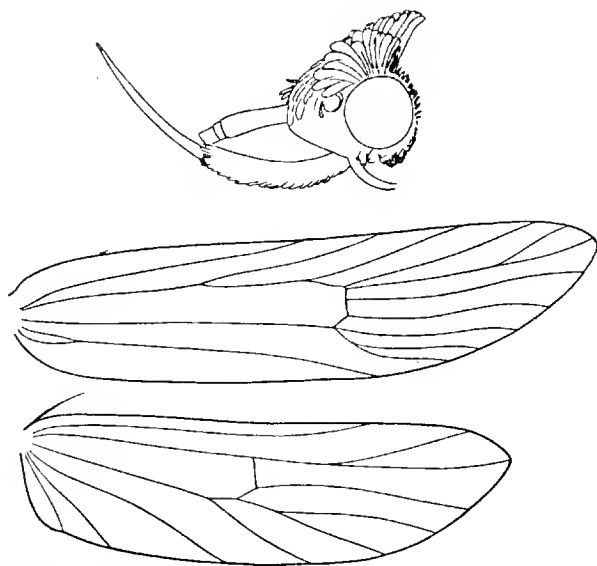


Fig. 557: *Homotima purpurata* gen. nov., spec. nov., male, wing neuration and head.

scales, hardly roughish anteriorly, slightly tapering towards the extremities, terminal segment 1, smooth, slender, acute. Maxillary palpus minute, appressed. Thorax smooth. (Posterior legs missing.) Fore wing with costa gently convex, apex moderately pointed, termen rounded, long, very oblique; 1b furcate at base, 2 and 3 stalked from the angle,

4 connate with the stalk, 7 and 8 long-stalked, 7 to costa, 9 approximated, 11 from the middle, cell rounded posteriorly. Hind wing 1, cilia under 1, elongate-subtrapezoid, without cubital pecten, termen gently rounded; 2 from before the angle, 3 and 4 stalked, 5 remote, curved downward towards base, 6 and 7 stalked, free, from the base of the wing (cell being open between 5 and 6).

Genotype *Homotima purpurata* spec. nov., female.

Very distinct by peculiarly ciliated antennae. Judging from the male genitalia (which are described below), allied with *Hypatima*. Probably also near to *Lysipatha* MEYRICK, from New Guinea (the genitalia of which are unknown), but differing by the thickened median segment of the palpus, and the stalked veins 6 and 7 in the hind wing; the neuration is congruent with that in *Myconita* MEYRICK, but that genus has shorter antennae.

***Homotima purpurata* spec. nov. (figs. 553, 557)**

♂ 13 mm. Head light ochreous, slightly infuscated. Antenna pale ochreous, narrowly ringed with fuscous. Palpus light ochreous, terminal segment pale ochreous, a narrow dark fuscous streak along its anterior edge, dark fuscous. Thorax fuscous, patagia light ochreous. Abdomen dull pale fuscous. Legs light ochreous, suffused with dark fuscous above, except on the articulations of the segments. Fore wing sublanceolate, gradually and somewhat obliquely dilated, broadest at $\frac{4}{5}$, costa moderately curved at the base, straight posteriorly, apex obtuse, termen broadly rounded, oblique, base of the dorsum hardly prominent. Pale golden-ochreous, evenly irrorated with light purple; a broad longitudinal patch of dark greyish-fuscous irroration in the disc at $\frac{4}{5}$, not reaching the margins of the wing; first discal stigma at $\frac{1}{3}$, formed by three rather distant black points, arranged in a triangle; second discal stigma large, rounded, on closing vein (at $\frac{3}{5}$). Cilia pale ochreous-fuscous. Hind wing glossy whitish-ochreous, slightly deeper ochreous towards the apex. Cilia pale ochreous.

Tegumen crect-tubular. Uncus simple, subtriangular, top denticulate. Gnathos, an acute pending dagger with transversely dilated base. Valva very narrow, lanceolate, with top dilated, slightly bristled. Vinculum, a strong cylinder, incised ventrally, with a dentate process at each side of the incision (possibly representing the arms of the anellus which is soldered with the vinculum), a longer curved and pointed arm laterad of the preceding. Saccus developed. Aedoeagus with a bulbate base and a sub-obtuse top. (Slide no. 1118 D, type).

Mist Camp, 1800 m, January 3, 1939. One specimen.

***Hypatima* HÜBNER, 1826**

Hypatima HÜBNER, 1826, Verz. Eur. Schmett., p. 415. STEPHENS, Ill. Brit. Ent. Haust., vol. 4, p. 422, 1835. WALSHINGHAM, Ent. Monthl. Mag., vol. 45, p. 48, 1909.

FLETCHER, Mem. Agr. Ind., Ent., vol. 11, p. 113, 1926. PIERCE, Genit. Brit. Tin., p. 21, pl. 12, 1935.

Chelaria HAWORTH, 1828, Lep. Brit., vol. 4, p. 526. STEPHENS, Ill. Brit. Ent. Haust., vol. 4, p. 219, 1834. DUPONCHEL, Hist. Nat. Léop. Fr., vol. 11, p. 352, 1836. ZELLER, Isis, 1839, p. 197. HEINEMANN, Schmett. Deutschl., vol. 2, part 1, p. 294, 1879. SPULER, Schmett. Eur., vol. 2, p. 357, 1910. MEYRICK, Gener. Ins., fasc. 184, p. 155, 1925. Rev. Handb., p. 644, 1928. HERING, Schmett. Mittl. Eur., p. 100, 1932. GAEDE, Lepid. Catal. part 79, pp. 407—408, 1937.

Psoricoptera STANTON, 1854, Ins. Brit. Tin., p. 100. HEINEMANN, Schmett. Deutschl., vol. 2, part 1, p. 192, 1870. STAUDINGER & REBEL, Cat. Lep. Pal., vol. 2, p. 140, 1901. SPULER, Schmett. Eur., vol. 2, p. 359, 1910. MEYRICK, Handb. Brit. Lep., p. 604, 1895. HERING, Schmett. Mittl. Eur., p. 113, 1932.

Cymatomorpha MEYRICK, 1904, Proc. Linn. Soc. N.S. Wales, vol. 29, p. 411.

Deuteroptila MEYRICK, 1904, *ibidem*, p. 418.

Allocota MEYRICK, 1904, *ibidem*, p. 419.

Semodictis MEYRICK, 1909, Ann. Trans. Mus., vol. 2, p. 16.

Episacta TURNER, 1919, Proc. R. Soc. Queensl., vol. 31, p. 101.

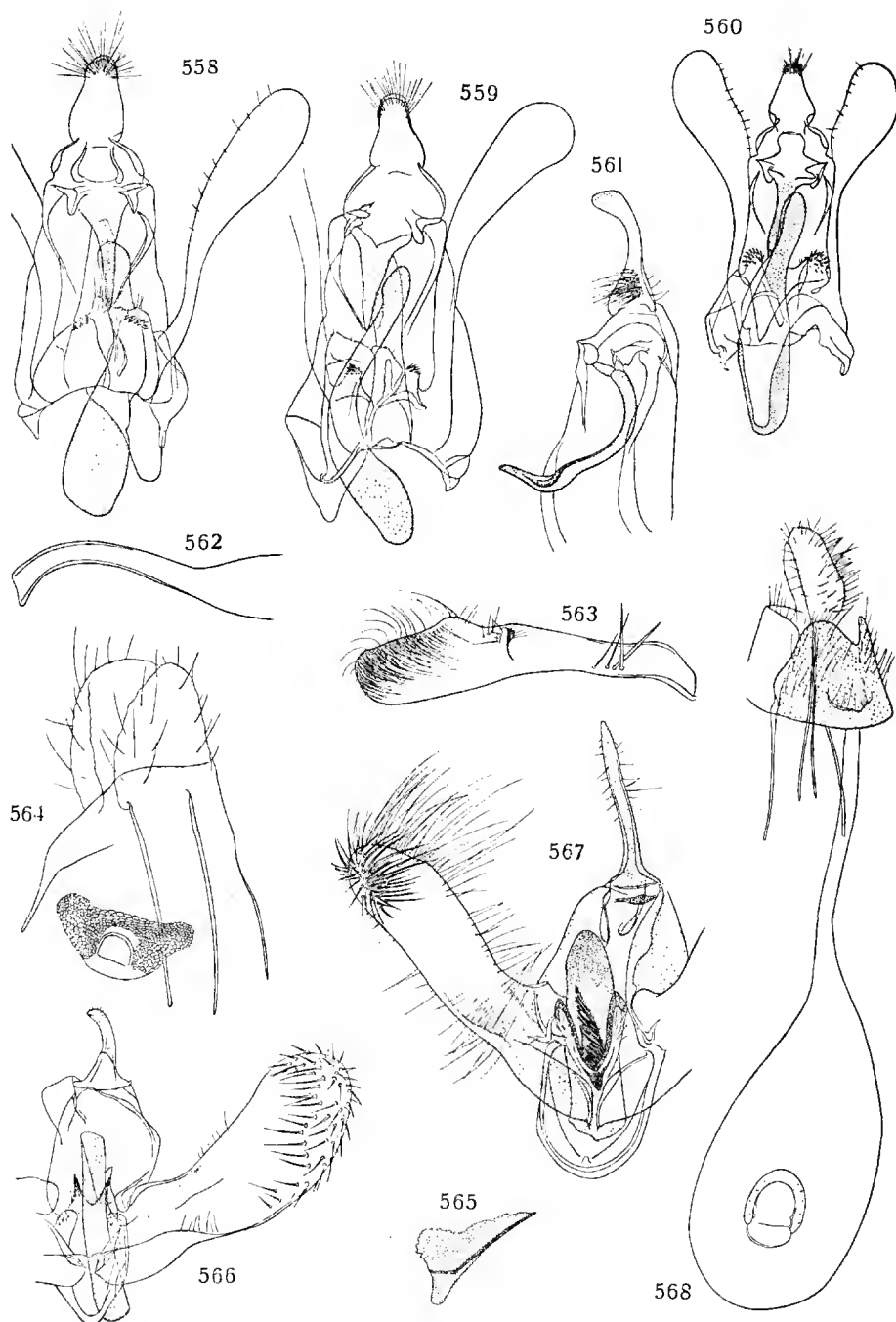
The genitalia of the three following species are very similar to those of the genotype, *H. conscriptella* HÜBNER (Europe) which have been figured by PIERCE (*loc. cit.*). The gnathos, the dentate projection at the base of the sacculus, and the aedoeagus show slight but distinct specific differences.

Key to the Papuan species of *Hypatima*

1. Median segment of labial palpus with a single tuft beneath 2
 Median segment of labial palpus with a double tuft 5
2. Fore wing with veins 7 and 8 out of 6. 3
 Fore wing with vein 6 separate, 7 and 8 stalked 4
3. Markings well-defined, black *sorograpta* MEYRICK
 Markings reduced to fuscous suffusion and stigmata. *asemodes* MEYRICK
4. A spot on middle of costa and a triangular suffusion on dorsum almost reaching this. *nimbigera* MEYRICK
 Dark dorsal suffusion not thus extended. *meliptila* MEYRICK
5. Fore wing with a median costal patch to below middle of wing or with fragments of such below costa 6
 Fore wing with median part of disc devoid of markings, instead: streaks along costa and dorsum and a blotch above tornus *cryptopluta* spec. nov.
6. An elongate irregular black spot before the middle below costa, no spot above tornus *artochroma* spec. nov.
 A triangular costal patch. 7
7. A spot above tornus connected with costa by dark suffusion. *subdentata* spec. nov.
 A slight dark fuscous strigula beneath costa at $\frac{2}{3}$ *demonstrata* MEYRICK

Hypatima subdentata spec. nov. (figs. 560, 564, 565)

♂ 16—17 mm, ♀ 16 mm. Head white, speckled with fuscous, a cloudy longitudinal median grey line on the vertex. Antenna blackish, posterior two-thirds ringed with white, scape white above. Palpus white, slightly speckled with dark fuscous; median segment with basal third, a narrow submedian, and a moderate subapical ring, fuscous; this segment with



Genitalia of Gelechiidae. Fig. 558: *Hypatima arthochroma* spec. nov., male. Fig. 559: *H. cryptopluta* spec. nov., male. Fig. 560: *H. subdentata* spec. nov., male. Fig. 561: *Hemiarcha melanogastra* spec. nov., male, tegumen, uncus and gnathos. Fig. 562: *idem*, aedeagus. Fig. 563: *idem*, valva. Fig. 564: *Hypatima subdentata* spec. nov., female. Fig. 565: *idem*, signum. Fig. 566: *Crocantbes protoma* spec. nov., male. Fig. 567: *C. megalophthalma* spec. nov., male. Fig. 568: *C. protoma* spec. nov., female.

two large projecting tufts below, first pointed, second truncate, each of them fuscous, mixed with white along anterior edge; terminal segment with the base, the tip and two broad rings, dark fuscous, with two minute tufts on the upper edge. Thorax whitish suffused with fuscous along the edges, tegula whitish, densely irrorated with fuscous. Abdomen sordid pale ochreous. Legs whitish speckled with fuscous, anterior leg blackish above except the articulations of the segments, median femur and tibia each with two irregular dark fuscous bands, median tarsus with the basal segments dark fuscous except their apex. Fore wing with veins 7 and 8 stalked, 6 separate; sublanceolate, broadest before the middle, costa moderately curved, appearing slightly concave beyond the middle, apex rather obtuse, termen rounded, considerably oblique. White, irrorated with light and dark fuscous, marked with fuscous-blackish. Costa from the base to beyond the middle smooth, densely irrorated with fuscous, with two rounded dark fuscous dots: at $\frac{1}{2}$ and $\frac{1}{3}$, respectively, and two elongate dots beyond the middle, hardly separated by a narrow whitish transverse line; posterior part of the costa from beyond the middle ciliate, with some six ill-defined fuscous dots becoming greyish towards the apex, penultimate one dark fuscous, larger, connected with a transverse dark fuscous patch in the disc beyond the cell, reaching halfway across the wing, truncate below; an ill-defined angulate transverse fascia from the first costal dot to $\frac{1}{4}$ of the dorsum; three light ochreous tufts of slightly raised scales, edged posteriorly with white, one above the middle of the disc beyond base, two in a slightly oblique transverse series at $\frac{1}{3}$, the lower of these below the fold; three dorsal spots of blackish irroration, first elongate, along the base, second small, round, beyond $\frac{1}{4}$, third somewhat larger, round, above $\frac{2}{5}$; a subtriangular patch before the middle of the disc from below the fold, narrowly connected with the second costal dot, broadly with the third one, together with these forming a V-shaped fuscous-black mark, dark brownish fuscous above the cell and on top; this top almost connected with a short streak of this colour along the fold posteriorly; a faint brownish suffusion between this streak and the dorsum; an elongate light tawny-fuscous patch above posterior part of the fold from about $\frac{3}{5}$ of wing to the tornus, above hardly reaching to the middle of the disc, the middle of the upper edge abruptly erected in a triangular projection reaching to below the costa, traversed by a fuscous-black streak which also forms a narrow upper edge to the elongate patch; a blackish interrupted longitudinal line from beyond this to the termen below the apex, traversing a faint subterminal spot of fuscous irroration. Cilia sordid whitish-greyish, tinged ochreous towards the tornus, speckled with white towards the apex, a cloudy grey submedian band with three dark grey bars, first bar apical. Hind wing sordid pale greyish-fuscous with a faint bluish opalescence, becoming light fuscous towards the apex and the costa. Cilia light fuscous, with pale tips.

Gnathos abruptly narrowed above the base, slightly dilated towards

the apex, apex acute. Basal projection of the saeculus broad, short. Aedoeagus with the basal two-thirds bulbate. (Slide no. 960 D, holotype.)

Ostium narrow, supported by an invert-trapezoid plate with retinate surface. Ductus bursae simple. Bursa copulatrix moderate. Signum, a funnel-shaped irregular sclerite. (Slide no. 961 D, allotype.)

Mist Camp, 1800 m, January 9, 1939 (holotype, male), January 17, 1939 (allotype, female), January 11, 1939. Top Camp, 2100 m, January 25, 1939. Three males, one female.

***Hypatima artochroma* spec. nov. (fig. 558)**

ἄρτος = bread, *χρῶμα* = colour

♂ 22 mm. Head sordid white, irrorated with pale fuscous. Antenna with scape whitish, ringed with pale fuscous, flagellum fuscous, finely ringed with white, the apical fifth dark fuscous, with five distinct white rings. Palpus whitish, basal segment fuscous, median segment with a basal and a subapical dark fuscous bands, each corresponding with a large projecting fulvous truncate tuft below, terminal segment with the apex, a narrow basal, and two median rings, blackish-fuscous, two minute tufts on the upper edge. Thorax sordid whitish irrorated with pale fuscous, posterior half except apex suffused with light fuscous. Abdomen sordid pale greyish-ochreous. Legs sordid ochreous-whitish, anterior leg blackish above, articulations of the tarsal segments white, median tibia with two narrow median bands above, median tarsus with the basal half of the segments 1—3 dark fuscous, posterior tarsus pale fuscous, whitish-ringed. Fore wing with veins 7 and 8 stalked, vein 6 free; elongate-ovate, hardly dilated, broadest in the middle; costa moderately curved towards the base, hardly curved posteriorly, apex very obtusely pointed, termen rounded, oblique. Lilae whitish, costal edge whitish, densely irrorated with fuscous, marked with black. Extreme base of the costal edge narrowly dark fuscous, somewhat more than the basal half of the costa smooth, with four dark fuscous dots; first dot before $\frac{1}{6}$, second dot large, at $\frac{1}{4}$, connected by a slightly inwards-oblique irregular fuscous streak with a dark fuscous oblique dash above $\frac{1}{3}$ of dorsum, and almost confluent with a moderate invert-subtrapezoid fuscous patch at $\frac{2}{5}$ of the disc; this patch irregularly edged with black anteriorly and posteriorly, with the upper posterior edge obliquely extended; the third and fourth costal dots elongate, dark fuscous, separated by a whitish transverse line; less than the posterior half of the costa ciliate; with a small pure white postmedian spot, beyond this with four somewhat suffused fuscous dots, first dot small, other equal and equidistant, last dot well before the apex; a moderate dark fuscous streak along the middle of the dorsum: a large oblique patch of light fuscous suffusion irregularly irrorated and strigulated with darker fuscous, extending from the posterior half of the dorsum towards $\frac{3}{4}$ of

the costa and connected by two suffused fuscous streaks along veins with the penultimate pair of costal dots; a lilac-whitish small spot on the dorsum before the tornus; an ill-defined fuscous subapical patch interrupted above, extending from below the penultimate costal dot to the middle of the termen, traversed in the middle by a longitudinal blackish line. Cilia along costa lilac-whitish, barred with dark fuscous opposite the dots, along the termen fuscous-whitish, faintly twice barred with fuscous, around the apex suffused with fuscous. Hind wing pale fuscous-grey; apex suffused with light fuscous. Cilia pale greyish-fuscous, with whitish tips and a sordid whitish-ochreous basal line.

Gnathos gradually narrowed towards the apex. Basal projection of the sacculus large. Aedoeagus moderately long, with basal half bulbate. (Slide no. 973 D, type.)

Moss Forest Camp, 2600—2800 m, November 23, 1939. One specimen.

***Hypatima cryptopluta* spec. nov. (fig. 559)**

$\kappa\rho\upsilon\pi\tau\acute{o}\varsigma$ = concealed, $\pi\lambda\omicron\upsilon\tau\omicron\varsigma$ = richness

♂ 29 mm. Head white, vertex mixed with dark grey. Antenna white, ringed with dark grey, scape with broad basal and subapical black bands. Palpus white, irrorated with grey, basal segment pure white, with a narrow median grey ring; median segment with four black rings: first ring subbasal, fourth apical; with two broad truncate tufts below, tinged fuscous; terminal segment with two broad fuscous-grey rings irrorated with white, with two small black tufts on the upper edge. Thorax grey mixed with white laterally, apical half mixed with black, a moderate median white band, apex white. Abdomen glossy pale ochreous-greyish, valvae mixed with darker grey. Legs sordid white, marked above with black: anterior femur with a subapical spot, anterior tibia with two, median with three irregular spots, basal segment of anterior and median tarsus black except the apex, the second and third segments black at base, posterior tarsus irrorated with fuscous-grey. Fore wing with veins 7 and 8 stalked, 6 separate; elongate, rather narrow, broadest at $\frac{1}{4}$, thence gradually narrowed, costa curved anteriorly, appearing rounded-prominent at $\frac{1}{3}$, almost straight posteriorly; apex rounded, termen rounded, oblique. White, disc anteriorly slightly suffused with pale ochreous-olive, irrorated and partially suffused with greyish, fuscous and black, these markings with strong blue opalescence in certain lights. Base of the costa pure white, extreme edge blackish; anterior $\frac{3}{5}$ of the costa smooth, from beyond the base irrorated with greyish and fuscous, with five dark grey spots; first spot beyond base, ill-defined, first to fourth tolerably equidistant, fourth and fifth spots approximated, separated by a narrow white transverse streak, both somewhat elongate, larger than other spots; posterior $\frac{2}{5}$ of the costa ciliate, white, with four equidistant

irregularly rounded black dots, ultimate dot well before the apex; an irregular streak of black irroration mixed with dark grey along the dorsum, forming an almost isolated semioval patch along the basal fifth (with a small appressed tuft of pale ochreous scales beyond the middle of the base of wing), and a flattened-triangular patch at $\frac{1}{3}$ of the dorsum; this black streak twice interrupted by white ground colour posteriorly; a line of grey-olive irroration forming an ovate loop on the base, originating from the first dorsal patch; a broad somewhat irregular vertical submedian transverse band of grey-olive irroration edged with white raised scales, mixed with white and traversed by white ground colour along the fold; a vertical transverse fuscous blotch beyond preceding, reaching $\frac{2}{3}$ across wing, irregularly constricted in the middle; a transverse band at $\frac{2}{3}$, somewhat outwardly oblique, from the dorsum before the tornus, not reaching costa, grey with olive (and blue) opalescence, anterior and posterior edges black; anterior narrow, twice deeply zigzagged, posterior edge broad, outwardly concave; followed by an irregular transverse spot of fuscous irroration from below the costa to below the middle of the disc, connected above with the penultimate pair of the costal dots, posterior edge with two short parallel slightly inwards-oblique, almost horizontal black streaks, running along the lower edge and below the costa; posterior edge deeply concave between these; an interrupted row of black scales scattered below costa from beyond the base to the middle; a subterminal transverse patch from before the apex to before the lower third of the termen; apex and termen with a row of dark grey dots. Cilia dark grey with two-three minute transverse whitish lines. Hind wing glossy, sordid whitish, posterior half gradually becoming fuscous towards apex; cilia grey-fuscous with whitish tips.

Gnathos gradually narrowed towards the apex, somewhat shorter than in the preceding species, with a broader base. Basal projection of the saccus small. Aedeagus rather long, sinuate, the basal third bulbate. (Slide no. 974 D, type.)

Rattan Camp, 1150 m, January 11, 1939. One specimen.

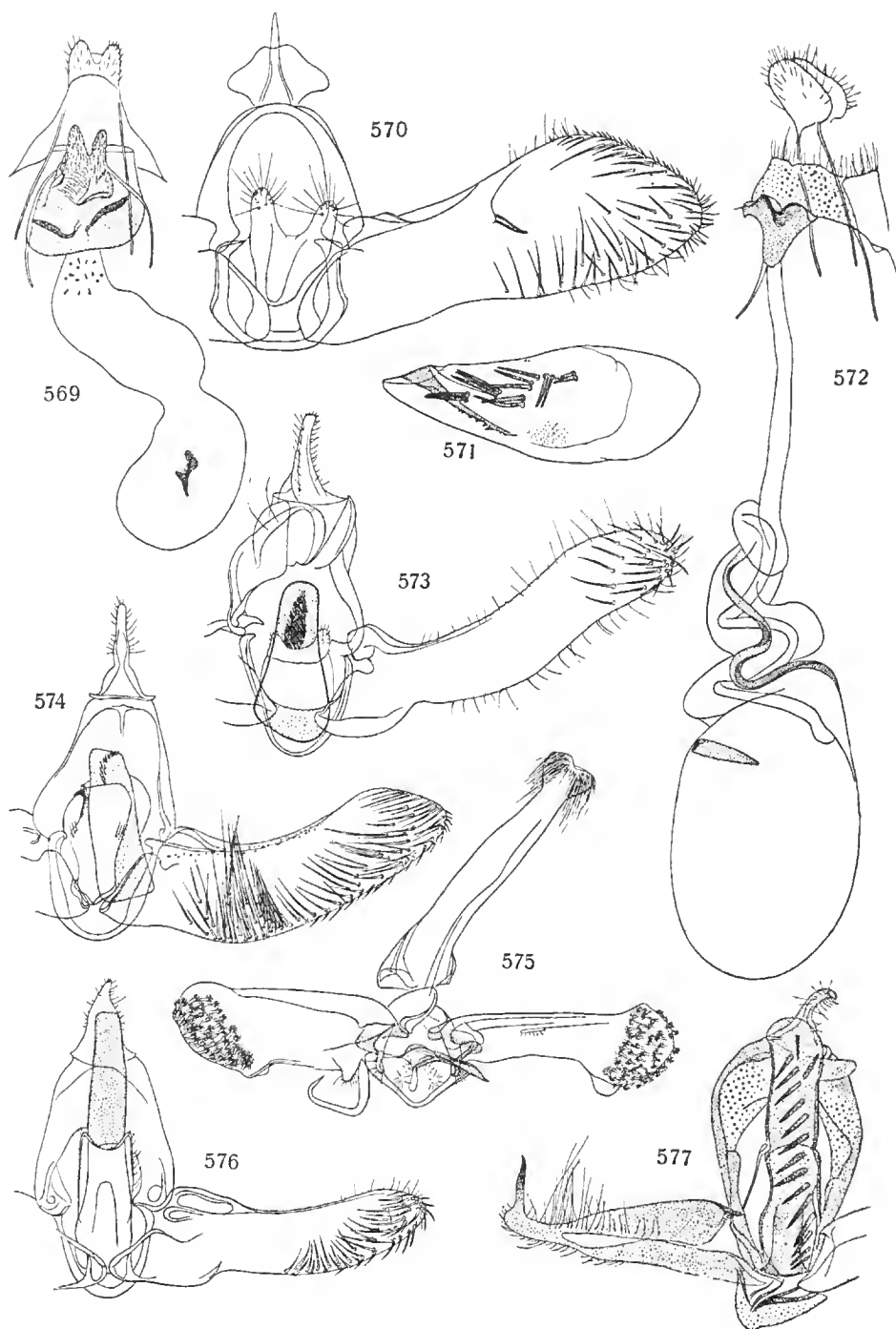
Hyptiastis MEYRICK, 1911

Hyptiastis MEYRICK, 1911, Journ. Bomb. Nat. Hist. Soc., vol. 20, p. 733. Gener. Ins., fasc. 184, p. 212, 1925. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 116, 1929. GAEDE, Lepid. Catal., part 79, p. 495, 1937.

***Hyptiastis microcritha* spec. nov.**

μικρός = small, *κρήνη* = kernel

♀ 12 mm. Head fuscous-white, a broad median longitudinal grey band over vertex and face. Antenna (partially missing) whitish, ringed with light grey. Palpus whitish, median segment suffused with dark fuscous-



Genitalia of Gelechiidae. Fig. 569: *Crocantbes leucodonta* spec. nov., female. Fig. 570: *C. anactostola* spec. nov., male. Fig. 571: *idem*, aedeagus. Fig. 572: *C. sceptrophora* spec. nov., female. Fig. 573: *C. pyrostola* spec. nov., male. Fig. 574: *C. sceptrophora* spec. nov., male. Fig. 575: *Anarsia anisodonta* spec. nov., male. Fig. 576: *C. heliocharis* spec. nov., male. Fig. 577: *Gonaepa dysthyma* spec. nov., male.

grey, almost blackish along the lower edge, terminal segment with a fine blackish line along the anterior edge. Thorax light fuscous-grey. (Abdomen missing.) Legs grey, anterior tibia and tarsus blackish above, pale-ringed on the articulations. Fore wing elongate-subovate, costa considerably curved along anterior half, straight posteriorly, apex pointed, termen moderately sinuate, oblique. Pale fuscous, suffused with light grey, tinged lilac. Costa narrowly suffused with darker fuscous-grey; about the apical seventh of the wing suffused with darker lilac-grey, the edge of this suffusion ill-defined, tolerably vertical; discal stigmata small, rounded, well-defined, blackish-brown: first suprmedian, at $\frac{1}{3}$, second median, at $\frac{3}{5}$. Cilia pale fuscous, with a broad dark fuscous-grey median shade. Hind wing pale fuscous-grey, with a faint bronze gloss; darker towards the apex, whitish along the costa. Cilia pale fuscous.

Bernhard Camp, 50 m, July 1, 1938. One specimen.

Crocantbes MEYRICK, 1886

Crocantbes MEYRICK, 1886, Trans. Ent. Soc. Lond. 1886, p. 277. Gener. Ins., fasc. 184, p. 231, 1925. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 59, 1929. GAEDE, Lepid. Catal., part 79, p. 509, 1937.

Aprosoesta TURNER 1919, Proc. R. Soc. Queensl., vol. 31, p. 151.

Male genitalia with tegumen moderate, erect. Uncus long or short, fine-bristled laterally, pointed. Gnathos absent. Transtilla absent. Valva narrow, elongate, cucullus rounded, sparsely covered with slender bristles, sacculus mostly ill-defined. Vinculum small, slender, rounded. Anellus, a large plate supporting aedoeagus from below, fine-bristled towards top laterally, which is emarginate, sometimes anellus almost bipartite. Aedoeagus rather stout, moderately long. Cornuti, a dense patch of bristles.

Female genitalia with the ostium little modified, limen mostly a short transverse narrow band. Ductus bursae simple. Bursa copulatrix rounded. Signum, if present, a weak crescentic sclerite with thickened upper edge.

Key to the Malayan and Papuan species of *Crocantbes*

(Malayan species are placed between brackets)

1. Dark fuscous; a blackish spot on end of cell, preceded by a grey spot, followed by a grey bar, a pale grey line from a white costal spot at $\frac{3}{4}$ to tornus.
 *phaeograpta* MEYRICK
 Not thus 2
2. Ground colour yellow or orange, posterior $\frac{1}{4}$ — $\frac{2}{3}$ and sometimes a narrow basal patch fuscous or blackish-purple, no other markings or stigmata 3
 Not thus 4
3. A small basal patch and posterior third of wing fuscous . . . *platycitra* MEYRICK
 No basal patch, posterior $\frac{1}{2}$ — $\frac{2}{3}$ of wing blackish-purple. . . *hemipyra* MEYRICK
4. Dark fuscous, purplish or black, with orange, yellow or whitish markings . . . 5
 Crimson, orange or yellow, with fuscous, purple or black markings 27

- Ground colour and markings not thus 37
5. A broad oblique median fascia across hind wing, continued by an oblique blotch in fore wing from middle of dorsum towards $\frac{3}{4}$ of costa; no other markings 6
 Markings not thus 9
6. Median fascia on costa of hind wing about twice as narrow as the blotch on dorsum of fore wing *miltina* DURRANT
 Median fascia on costa of hind wing as broad as, or broader than the blotch on dorsum of fore wing 7
7. Median fascia on costa of hind wing much broader than the blotch on dorsum of fore wing *thrasydora* MEYRICK
 Median fascia on costa of hind wing as broad as, or but little broader than the blotch on costa of fore wing 8
8. Markings deep orange; blotch in fore wing hardly reaching above furcation of veins 7 and 8 *philotima* spec. nov.
 Markings orange-yellow; blotch in fore wing reaching above furcation of 7 and 8, to about the middle of free part of 8. *xanthorrhoea* spec. nov.
9. Fore wing with a single transverse fascia, a single discal spot, or a transverse central patch which sometimes encloses a black stigma or a discal spot and is preceded by a dot of ground colour above middle of disc 10
 Fore wing with markings not thus 18
10. A single transverse spot on end of cell. *gelastis* MEYRICK
 Markings more extended 11
11. A basal patch only, with a concave edge *hecuba* MEYRICK
 Markings not, or not only, basal. 12
12. A broad, outwardly oblique transverse fascia before $\frac{1}{4}$ *protoma* spec. nov.
 Markings median or postmedian 13
13. A median fascia without discal stigma 14
 A large central patch, mostly enclosing a discal stigma 15
14. Median fascia narrow, straight *monodesma* MEYRICK
 Median fascia broad, dilated below *geniola* MEYRICK
15. Central fascia distinctly separated from costal and dorsal edge by ground colour *megalopthalma* spec. nov.
 Central fascia not distinctly separated from either costal or dorsal edge, or connected with both 16
16. Central patch separated from dorsum, but suffusedly connected with costa *carcharias* MEYRICK
 Central patch either touching dorsum, touching costa or extended along the latter. 17
17. Central patch only touching middle of costa, rounded above; terminal fascia of ground colour in hind wing without dentations in disc *pyrostola* spec. nov.
 Central patch extending over central third of costa, terminal fascia of ground colour in hind wing with a dentation in disc. *eurypyra* MEYRICK
18. Markings only along costa, sometimes extended across wing, but not reaching dorsum 19
 Transverse markings reaching dorsum, sometimes also dorsal and terminal markings present 24
19. Two wedge-shaped oblique spots from posterior part of costa half-way across wing. (*sceletopa* MEYRICK)
 Either an oblique fascia or a triangular patch from middle of costa and a smaller subapical costal spot. 20
20. A triangular patch from middle of costa well or not connected along the costa with a spot before apex 21
 A narrow oblique transverse fascia from middle of costa, not connected with subapical spot. 23

21. Yellow median patch connected along costa with subapical dot, thence continued as a marginal line in apex and along termen to tornus *celema* DURRANT
Whitish median patch sometimes narrowly connected along costa with subapical dot in female, not reaching beyond this; in male neither a connection of these marks, nor a marginal line 22
22. Whitish triangular costal spot extended across wing by a line, interrupted in middle to above dorsum beyond middle. *aulodocha* MEYRICK
Whitish triangular costal spot not thus extended across wing
. *leucodonta* spec. nov.
23. Cilia in fore wing purplish-fuscous with a yellowish basal line, along termen primrose-yellow except their base *fallax* DURRANT
Cilia in fore wing purplish-fuscous throughout, a yellow basal line
. *crypsichola* DURRANT
24. A terminal band present 25
No terminal band 26
25. Terminal band occupying posterior fourth of costa, attenuated to a point in tornus; a streak along costa, and a fasciate transverse blotch before middle not reaching dorsum. *xanthistia* MEYRICK
Terminal band much narrower, connected along costa and dorsum with a broad postmedian transverse fascia, brownish-ochreous, suffused with fuscous, with anterior edge and discal stigma blackish *prasinopis* MEYRICK¹⁾
26. Subterminal transverse interrupted line originating from a triangular costal spot *thalamectis* MEYRICK
No subterminal fascia or line *igneus* MEYRICK
27. Veins distinctly marked with black lines not reaching margins, mostly terminated by a black transverse fascia. 28
Veins not marked with black lines 31
28. A black basal patch; a suffused broad dilated purple transverse fascia beyond $\frac{1}{4}$, connected by a purple horizontal dilated streak with terminal patch which occupies posterior fourth of wing. *sceptrophora* spec. nov.
No basal patch 29
29. Dark neural lines terminated anteriorly and posteriorly by black transverse fasciæ *synochlopa* MEYRICK
Dark neural lines terminated by one such fascia only posteriorly 30
30. Fore wing throughout with a black marginal line; terminating fascia from $\frac{1}{4}$ of costa to dorsum before tornus *pyrochorda* MEYRICK
Black marginal line only around apex and along termen; terminating fascia at $\frac{5}{6}$ *triglenopa* MEYRICK
31. Crimson, a grey suffusion along tornal fourth with two projections almost to costa, a whitish costal streak and two whitish spots: above dorsum anteriorly and in disc *temeraria* MEYRICK
Not thus 32
32. Four or five transverse fasciæ, some of them narrow and irregular 33
One broad submedian fascia, or transverse fasciæ indistinct or absent 34
33. Four rather narrow, irregular fasciæ: two towards base, one at $\frac{2}{5}$ and one at $\frac{3}{4}$ *heliograptus* MEYRICK
Five fasciæ: two towards base, narrow, irregular, one at $\frac{1}{4}$, dilated below, a median line and a suffused band at $\frac{4}{5}$ (*sphocotypa* MEYRICK)
34. A narrow basal patch, a broad submedian fascia and a transverse terminal blotch *cleomorpha* MEYRICK
Transverse fasciæ interrupted or absent. 35

¹⁾ Occurs also in East Australia and Tasmania (teste MEYRICK).

35. Terminal fourth black, connected by an oblique attenuated fascia with costa near base. *ignigera* MEYRICK
Terminal patch not connected with anterior part of costa. 36
36. Basal patch extending to middle of dorsum; second discal stigma connected with terminal patch *thermocharis* MEYRICK
Basal patch extending to $\frac{1}{3}$ of dorsum, continued by a suffused marginal line to tornus; second discal stigma forming a transverse wedge-shaped mark, connected along costa with basal patch. *heliiocharis* spec. nov.
37. Crimson-rose, devoid of markings *phoenoteles* MEYRICK
Pale whitish-ochreous, rosy-crimson or light yellow, markings present . . . 38
38. Pale whitish-ochreous, markings light crimson. *sidonia* MEYRICK¹⁾
Rosy-crimson or light yellow, markings yellow or ochreous 39
39. Light yellow, four deep ochreous-yellow fasciæ parallel to termen.
. *scioxantha* MEYRICK
Light rosy-crimson or rosy-crimson 40
40. Light rosy-crimson, markings light yellow: a discal blotch and marks along costa before apex and termen *rhodantha* MEYRICK
Rosy-crimson with irregular suffused light yellow spots, costal and dorsal edge, a basal shadow, three transverse fasciæ and second discal stigma suffusedly dark fuscous *anactostola* spec. nov.

***Crocantbes protoma* spec. nov. (figs. 566, 568)**

πρό = fore, *τέμνω* = to cut

♂ 17 mm, ♀ 19 mm. Head and thorax dark purplish-fuscous. Antenna moderately flattened in the male; purplish-fuscous, scape purplish-black. Palpus purplish-black. Abdomen dark fuscous, venter yellow anteriorly. Legs yellow, suffused with blackish above; anterior and median femora throughout, tibiae except a narrow golden-ochreous postmedian ring, tarsi except the articulations, blackish; posterior leg yellow-orange, apical fourth of tibia above, and tarsus except the articulations, blackish. Fore wing with vein 9 out of 7 towards base; elongate, narrow, broadest at $\frac{1}{5}$, costa little curved at base, slightly bent towards the apex, faintly concave in the middle, apex subobtuse, termen hardly rounded, oblique. Deep purple-fuscous. A broad outwardly oblique bright orange transverse band occupying about the second sixth of the costa, running to the dorsum at about $\frac{2}{5}$ of wing length, edges somewhat irregular, anterior slightly undulate or moderately excavated in the middle, posterior moderately convex; in the female this band narrower, yellowish-orange, with the anterior edge distinctly concave, the posterior more convex, the band being slightly curved and dilated along the lower two-thirds. Cilia dark fuscous. Hind wing purple-fuscous, somewhat lighter than the fore wing, glossy; slightly more than the basal half of the wing bright orange in the male, orange-yellow in the female, outer edge of this colour strongly rounded, on the termen from before the end of the fold; cilia dark fuscous

¹⁾ Also in Queensland (teste MEYRICK).

as far as the termination of vein 1b, before this point orange-yellow.

Uncus moderate. Valva dilated, bristled to the middle, cucullus rounded; sacculus indicated. Vinculum erect-subovate. Anellus moderate, forming a slender furca. Acdoeagus slender. Cornuti absent. (Slide no. 950 D, holotype).

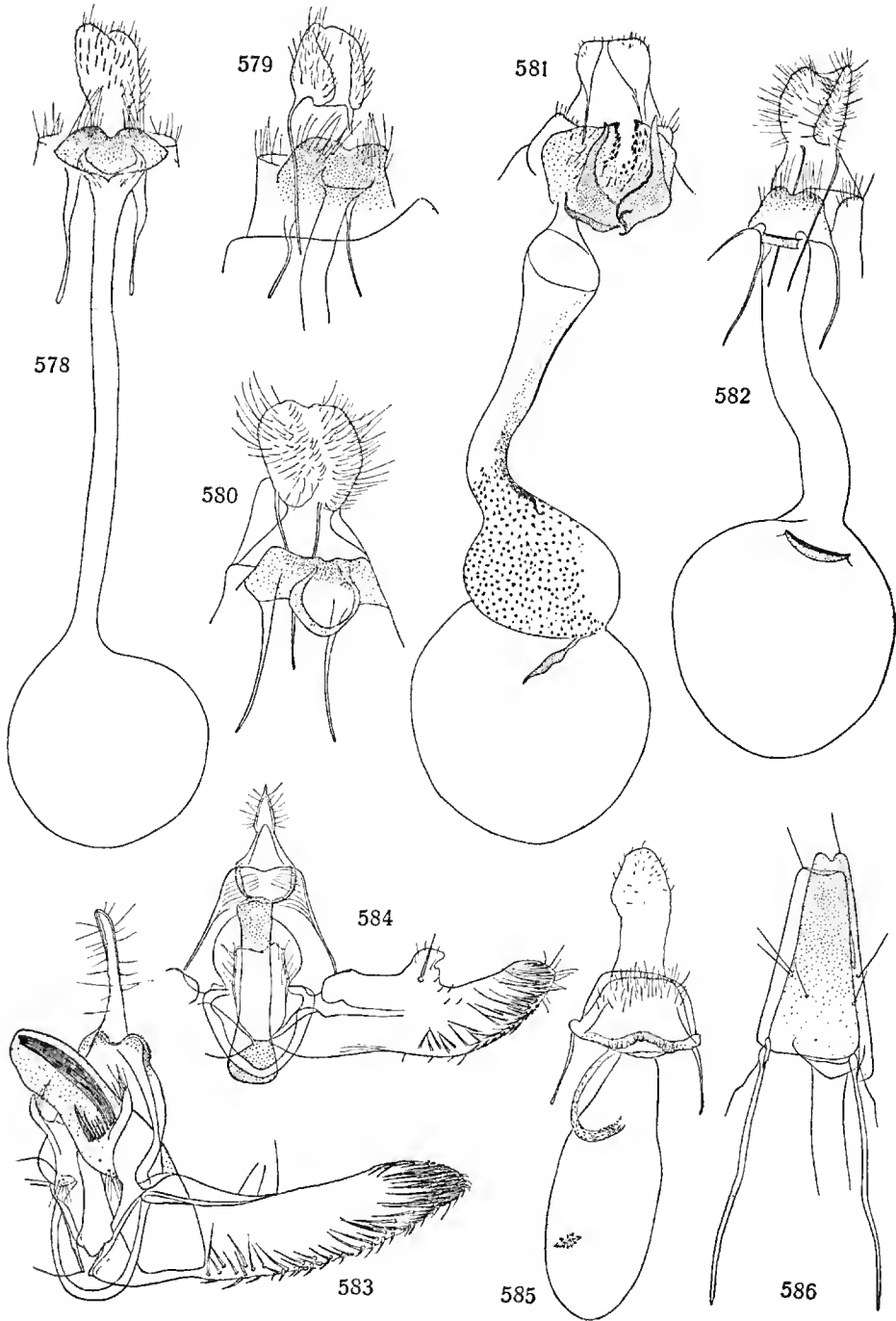
Seventh sternite excavate caudally, bristled throughout. Ostium simple with a bristled rim. Duetus bursae narrow. Bursa copulatrix large. Signum horseshoe-shaped, denticulate. (Slide no. 951 D, allotype.)

Rattan Camp, 1200 m, February 27, 1939, holotype, male, allotype, female. Two specimens.

Crocantbes sceptrophora spec. nov. (figs. 572, 574)

σκήπτρον = staff, *φέρω* = to bear

♂ 18 mm, ♀ 20—21 mm. Head metallic dark grey with greenish gloss, sides of the vertex and face purplish-black. Antenna purplish-fuscous in the male, dark purple in the female, apical half in the two sexes snow-white, apical tenth in the female black. Palpus in the male purplish, lower edge of the median segment white, terminal segment $\frac{1}{2}$, in the female deep purple, terminal segment over 1. Thorax metallic greenish-black, posterior edge and tips of the tegulae ochreous-whitish? (damaged). Abdomen in the male bright amber-yellow, in the female dark yellow, tinged brownish above, except the posterior edges of the segments. Under-side of the body light yellow, prosternum and mesosternum purple-blackish, coxae yellow, anterior and median femora purple-blackish. Fore wing with veins 8 and 9 stalked, 10 separate; narrowly elongate-sublanceolate, dilated, broadest at $\frac{4}{5}$, costa slightly curved at the base, subconave in the middle, curved towards the apex, apex obtusely pointed, termen considerably rounded, oblique. Bright orange-yellow. A moderate basal patch, dark purple in the male, greenish-black in the female, its edge somewhat irregular, outwardly oblique, convex. Other markings deep purple; a large transverse blotch occupying somewhat less than the second fourth of the wing from the dorsum to the upper edge of the cell, with anterior edge irregularly serrate, somewhat inwardly oblique, with posterior edge sending off five streaks arranged as follows: one along each veins 11 and 10, narrow, dilated towards costa; two somewhat broader, less regular streaks, submedian and subdorsal, first of these trifid posteriorly; a fifth longitudinal broader well-defined streak above the middle of the wing, gradually dilated posteriorly; all these streaks merging into a terminal purple patch occupying the posterior fourth of the wing from the termination of vein 9 to just above the tornus, connected by a suffused marginal streak with the termination of the purple streak along vein 10; a narrow purple line along vein 12 from $\frac{1}{5}$ of the wing to the costa, at the origin connected with the purple patch, a few purple scales along the



Genitalia of Gelechiidae. Fig. 578: *Crocantbes xanthorrhoea* spec. nov., female. Fig. 579: *C. philotima* spec. nov., female. Fig. 580: *C. megalophthalma* spec. nov., female. Fig. 581: *Gonaepa dysthyma* spec. nov., female. Fig. 582: *C. heliocharis* spec. nov., female. Fig. 583: *C. leucodonta* spec. nov., male. Fig. 584: *Sphenocrates neptis* spec. nov., male. Fig. 585: *Lecithocera brachyptila* spec. nov., female. Fig. 586: *L. nitens* spec. nov., female.

costa above that patch. Cilia purple. Hind wing orange-yellow, slightly paler than the fore wing, a blackish-fuscous dull patch along the termen, occupying about the posterior fifth of costa, narrowed below and reaching beyond the termination of vein 1c, edge somewhat irregular, moderately concave; a black pencil of hairs on vein 1b from the base. Cilia blackish-fuscous around the dark patch and along the termen to before the tornus, yellow elsewhere.

Uncus moderate. Valva slender, not dilated, bristled to before its base, cucullus obliquely truncate. Anellus broadly tubular, two short hooks at the apex. Vinculum rounded. Aedoeagus rather stout. Cornuti, a curved series of small teeth. (Slide no. 948 D, holotype.)

Seventh sternite with caudal edge truncate, with a minute emargination. Limen, a thickened V-shaped body. Ductus bursae narrow, spiraled, with a slender long cestum (collum of spermatophore figured beside this). Signum, a small transverse band. (Slide no. 949 D, allotype.)

Bernhard Camp B, 100 m, April 9, 1938 (holotype, male), April 11, 1938 (allotype, female), April 9—18, 1938. Bernhard Camp, 50 m, September 19, 1938 (J. OLTORF). Hollandia, sea level, July, 1938. One male, five females. An elegant, narrow-winged species, probably nearest to *C. ignea* MEYRICK.

***Crocantes megalophthalma* spec. nov. (figs. 567, 580)**

μέγας = large, *οφθαλμός* = eye

♂ 22 mm, ♀ 25 mm. Head dark greenish-grey, metallic. Antenna black in the male, greyish-fuscous in the female. Palpus whitish-ochreous, median segment suffused with black above and beneath, and towards apex, terminal segment black. Thorax purplish-black in the male, dark grey (damaged) in the female. Abdomen dark brownish-purple, in the female posterior edges of the segments with interrupted ochreous bands becoming pale yellowish towards, and on, the venter, almost obliterate on dorsum, in the male these bands distinct only on the venter. Legs dark purplish-fuscous, anterior femur, a median spot on the tibia below, spurs and tarsal rings suffusedly yellowish. Fore wing elongate-subtriangular, costa hardly curved towards extremities, straight in the middle, slightly prominent at $\frac{1}{4}$ and $\frac{3}{4}$, apex triangularly obtuse, termen tolerably straight, moderately oblique. Purplish-black, markings deep orange. A large erect-subovate dilated central patch occupying more than the median third of the wing and reaching from $\frac{1}{3}$ to $\frac{1}{5}$ of the disc, anterior edge tolerably vertical, with two acute anterior projections, on the lower edge of the cell and below the fold, respectively, upper edge gently convex, tolerably parallel to the basal half of vein 11, posterior edge gradually rounded, lower edge straight, parallel to the dorsum, running somewhat

above this; a moderate slightly attenuated streak of the ground colour separating this blotch from the costal edge, a narrow hardly attenuated streak from the dorsal edge; a small irregularly triangular deep orange spot in the cell before the central patch, in the male narrowly connected with the upper projection of the anterior edge of that patch; a rather large subrectangular transverse spot along the closing vein, with the anterior edge concave, the posterior moderately triangularly incised below the middle. Cilia purplish-black, with a faint whitish antemedian band. Hind wing blackish-purple, with dorsum purple, irrorated with black, markings deep orange. An irregular zigzag transverse fascia occupying the median half of the costa, abruptly narrowed in the middle by two deep acute incisions in its anterior edge, irregularly, and still more, narrowed along lower third and strongly angulate twice, anteriorly in the fold, posteriorly on vein 1c, irregularly incised anteriorly twice above the dorsum, ending on the dorsum before the tornus; posterior edge of this fascia broadly rounded, irregularly and moderately excavated between the veins in the middle of the disc; a rather large transverse subrectangular orange spot in the middle of the disc at $\frac{2}{5}$, with concave anterior, convex posterior edge. Cilia blackish-purple, a faint whitish antemedian line.

Uncus long, slender, pointed. Valva slightly sinuate, cucullus only with bristles. Sacculus indicated. Vinculum rather strong. Anellus deeply incised, almost dipartite, edge strongly sclerotized. Aedoeagus moderately stout, with a not bulbate base. (Slide no. 942 D, holotype.)

Seventh sternite in the female only slightly emarginate above, finely fissurate. Limen ring-like. (Slide no. 943 D, allotype.)

Rattan Camp, 1200 m, February 15, 1939 (holotype, male). Araucaria Camp, 800 m, March 9, 1939 (allotype, female). Two specimens. Nearest to *C. carcharias* MEYRICK.

Crocantes pyrostola spec. nov. (fig. 573)

$\pi\tilde{\nu}\rho$ = fire, $\sigma\tau\omicron\lambda\acute{\eta}$ = gown

♂ 19 mm. Head, thorax and abdomen blackish-fuscous with a purple gloss. Antennae purplish-fuscous, paler towards the apex. (Palpi missing.) Legs blackish-fuscous, anterior femur, median band of tibiae, anterior half of basal segments and articulations of tarsi ochreous-whitish, posterior tibia yellowish below. Fore wing with veins 8 and 9 out of 7; elongate-subovate, dilated, broadest beyond $\frac{3}{4}$, costa gradually and moderately curved towards the extremities, little so in the middle, apex subobtusely, termen little rounded, oblique. Deep fuscous-purple, more tinged purple towards the base, markings deep orange. A large deep orange blotch slightly beyond the middle of the wing, tolerably circular, somewhat obliquely (outwards) erect, terminated at about the lower $\frac{3}{4}$ by the dorsum, extending along the dorsum from beyond the middle to the tornus, with

the top just not reaching the middle of the costa; anterior edge of this patch irregularly and moderately undulate, its base cut by a short narrow attenuated streak of the ground colour, projecting posteriorly along the dorsal edge; posterior edge finely indent on the veins of the lower half of the disc; a transverse subrectangular mark along the closing vein, slightly dilated above (situated above and before the centre of the orange patch). Cilia dark fuscous-purple. Hind wing blackish-fuscous, a very broad deep orange slightly postmedian transverse fascia, occupying about the middle half of the wing breadth, basal area moderately angulate in the middle, tolerably straight above and below the angulation; posterior edge of the fascia broadly rounded, from $\frac{4}{5}$ of the costa to the terminal edge before the termination of the fold; this fascia includes a transverse spot along the closing vein, as large as that of the fore wing, but more regularly rectangular, with the anterior edge slightly concave. Cilia dark fuscous-purple.

Uncus moderate, narrowed, its top truncate; ventrally two weak longitudinal folds of the tegumen below the base of the uncus (perhaps indicating the gnathos). Valva distinctly sinuate, only cucullus sparsely bristled. Anellus broad, rather short, with a moderate, fine-bristled projection at each side above. Aedocagus short, with a strongly dilated base. (Slide no. 941 D, type.)

Araucaria Camp, 800 m, March 25, 1939. One specimen. Nearest to *C. eurypyra* MEYRICK.

***Crocantes heliocharis* spec. nov. (figs. 576, 582)**

$\eta\lambda\iota\omicron\varsigma$ = sun, $\chi\acute{\alpha}\rho\iota\varsigma$ = beauty

♂ 17 mm, ♀ 18 mm. Head and thorax bronze-fuscous, antenna deep purplish-fuscous. Palpus golden-yellow, median segment along posterior half infuscated, the terminal segment dark fuscous. Abdomen bright yellow, an erect dark fuscous dorsal patch from the third segment to the apex, anterior extremity rounded, on segment 6 extended to a ring, interrupted on the venter, occupying this entire segment, on the tergite 8 narrowed to a triangular spot. Legs yellow, anterior leg blackish above, median knee, a broad apical ring of median tibia, and tarsus above, blackish, posterior leg with blackish femur, apex of tibia, spurs and tarsus. Fore wing with veins 7 and 8 stalked, 9 connate; elongate-subtriangular, rather narrow, broadest beyond $\frac{3}{4}$; costa gently curved anteriorly, moderately bent before the apex, apex triangularly pointed, termen little rounded, oblique. Deep orange, markings blackish-fuscous. A large basal patch occupying slightly more than $\frac{2}{5}$ of wing, above cell extended to before $\frac{2}{3}$ of the costa, along the dorsum with a moderate attenuated streak to the tornus, the edge of the patch between these extensions more or less irregularly undulate, inwardly oblique; a transverse moderate

blotch along the closing vein, anterior edge indent in the middle, posterior slightly concave, vertical, top confluent with the costal streak before its extremity; an apical patch occupying less than $\frac{1}{5}$ of wing, with the anterior edge moderately outwardly oblique running from $\frac{3}{4}$ of the costa to the termen above the tornus, straight and finely serrulate in the male, slightly concave below the middle, and well-defined in the female; a few scattered blackish-fuscous scales beyond the end of the costal streak and along the fold posteriorly. Cilia blackish-fuscous, in the tornus whitish-ochreous with a grey apical third, around the apex with the posterior half whitish. Hind wing bright orange, markings blackish-fuscous. A moderate basal patch with an irregular, rounded edge; a rather narrow costal streak, connected with the basal patch, merging in a terminal fascia which is dilated towards the costa to $\frac{1}{5}$ of the wing breadth, rather quickly narrowed below, with the anterior edge regularly concave, faintly serrate on veins; a strongly inwards-oblique, broad irregular central fascia from the middle of the costa to the tornus, dilated on the lower third and connate with the terminal streak on the termination of vein 1c, its anterior edge with two deep irregular indentations, above and below the middle, respectively; its posterior edge deeply zigzagged, forming two irregular subacute rather long projections, above and below middle of disc, respectively; upper projection broader and longer, reaching almost halfway towards the terminal fascia. Cilia blackish-fuscous, yellowish on the base of the dorsum, tips opposite the apex tinged pale ochreous.

Uncus short, pointed. Valva straight, bristled from the top of the cucullus to the middle of the ventral edge. Anellus, an erect plate with concave apical edge. Aedoeagus rather long and slender, cornuti absent. (Slide no. 939 D, holotype.)

Seventh sternite in the female slightly emarginate. Limen, a hollow short band. Signum, a small crescentic sclerite with a thickened upper rim. (Slide no. 940 D, allotype.)

Araucaria Camp, 800 m, March 12, 1939 (holotype, male), March 17, 1939 (allotype, female), March 7—29, 1939. Rattan Camp, 1200 m, March 14, 1939. One male, six females. Nearest to *C. thermocharis* MEYRICK.

***Crocantnes heliograptus* MEYRICK, 1929**

Crocantnes heliograptus MEYRICK 1929, Exot. Microl., vol. 3, p. 520.

Distribution: New Guinea, Dampier Island.

Rattan Camp, 1500 m, March 11, 1939. One female.

***Crocantnes philotima* spec. nov. (fig. 579)**

φιλότιμος = luxury-loving

♀ 25—26 mm. Head metallic greenish-black, face pale yellow below. Antenna dark greyish-fuscous, black towards the base, scape black above.

Palpus ochreous, median segment densely irrorated along the posterior half with dark fuscous, terminal segment about 1, dark fuscous. Thorax black. Abdomen fuscous-black, segments 2—6 with yellow posterior bands becoming narrower and shorter posteriorly, being interrupted sublaterally, preceded by scattered yellow scales, and fine bristles; venter pale yellow. Legs orange-ochreous, anterior coxa whitish, this colour forming a transverse spot reaching over the shoulder and the lateral part of the patagium, anterior tibia and tarsus blackish-fuscous above, yellow-ringed, median and posterior tibia with a large apical black ring, median and posterior tarsus suffused with blackish-fuscous except towards the base and at the articulations of segments. Fore wing elongate-subtriangular, broadest at $\frac{4}{5}$, costa considerably curved at the base, apex moderately rounded, termen tolerably straight, moderately oblique. Deep blackish-purple. Markings bright orange; a broad transverse outwardly oblique blotch from the dorsum, occupying it from beyond $\frac{2}{5}$ to about $\frac{4}{5}$, inwardly oblique, reaching to vein 10 at about $\frac{4}{5}$ of the wing length, crowned by a faint irroration of a few orange scales, hardly reaching the costa; anterior edge oblique, somewhat irregular, with short blunt projections between the veins, much projecting below the cell to the dorsal edge, posterior edge moderately convex, little oblique, with regular dentations on all veins; the wing beyond patch lighter purple. Cilia purplish-fuscous, with the basal third purplish-black. Hind wing blackish-purple; a broad slightly ante-median transverse bright orange fascia occupying about $\frac{1}{3}$ of the wing breadth, anterior edge somewhat undulate, with an acute rising projection below the middle, followed by a broader, sometimes truncate, incision of ground colour; the edge of the fascia convex above this incision, acutely incised by the ground colour once more on the upper edge of the cell; posterior edge undulate, rather concave along its third fourth, convex below this; this fascia on the costa of hind wing rather narrower than the base of the orange blotch in the fore wing; a broad quickly narrowed whitish subcostal streak from the base to the fascia. Cilia dark fuscous-purple, basal third blackish-purple.

Seventh sternite with its caudal edge truncate, moderately emarginate. Limen hardly sclerotized. (Slide no. 957 D, holotype.)

Hollandia, sea-level, July, 1938 (holotype), July 2—19, 1938. Bernhard Camp, 50 m, August 24, 1938. Three females. Closely allied to *C. thrasydora* MEYRICK.

***Crocantes xanthorrhoea* spec. nov. (fig. 578)**

ξανθός = yellow, *ῥέω* = to flow

♀ 22—22.5 mm. Head fuscous-golden-bluish, faeæ pale yellow. Antenna fuscous, apical third sordid whitish. Palpus pale yellow, median segment with the upper edge narrowly light fuscous, this colour slightly extended

before the apex, terminal segment pale fuscous. Thorax greyish-fuscous, with a slightly purple-bluish gloss. Abdomen fuscous, with broad light yellow bands, occupying segment 3 entirely, segments 2 and 4 except their anterior edges, on segments 5—6 narrow, laterally not interrupted; venter entirely pale yellowish. Legs pale yellow, partially infuscated, especially the tarsi above, posterior tibia mixed with fuscous above, with a fuscous apical ring. Fore wing with costa curved anteriorly, straight posteriorly, apex rather rounded, termen straight above, rounded beneath, moderately oblique. Purplish-fuscous, markings rather light orange-yellow; a broad transverse inwardly oblique blotch from the dorsum, occupying it from before its middle to $\frac{4}{5}$, almost reaching the costa at $\frac{4}{5}$; anterior edge of this blotch oblique, slightly irregular, tolerably straight, hardly projecting below cell, its posterior edge convex, moderately crenulated (apex of this patch mostly more rounded than in *C. philotima*). Cilia purplish-fuscous, basal third darker. Hind wing purplish-fuscous, a broad rather light orange-yellow median transverse fascia gradually dilated towards the costa, on costa broader than the base of the patch in the fore wing, anterior edge somewhat irregular, tolerably straight, an irregular subacute projection below the middle, followed above by a triangular incision of the ground colour; posterior edge of the fascia tolerably straight, hardly concave, diverging from terminal edge downward. Cilia purplish-fuscous, basal third darker.

Seventh sternite with the caudal edge ovate, considerably emarginate. Limen more sclerotized than in *philotima*. Ductus bursae long, narrow. Bursa copulatrix simple. (Slide no. 958 D, holotype.)

Bernhard Camp, 50 m, April 13, 1930 (holotype). Mountain slope above Bernhard Camp, 600 m, April 4—13, 1938. Hollandia, sea level, July 19, 1938. Four females. Closely allied to the preceding species and to *C. thrasydora* MEYRICK.

***Crocantes leucodonta* spec. nov. (figs. 569, 583)**

λευκός = white, *όδούς* = tooth

♂ 20 mm, ♀ 24 mm. Head light greyish-fuscous with a lilac shine, face and sides of the crown whitish-ochreous. Palpus in the male with the terminal segment modified: slightly under 1, moderately thickened, cylindrical, with a fine longitudinal furrow along its inner side, apex subacute, basal third more thickened with roughish somewhat projecting short hairs, apical two-thirds smooth; whitish-ochreous, basal segment dark fuscous, median segment strongly irrorated with dark fuscous except towards its apical fourth and along the lower edge which is flattened and slightly roughish; terminal segment fuscous-grey with a lilac gloss, its basal third tinged whitish-ochreous; in the female palpus normal, whitish-ochreous, median segment moderately irrorated with dark fuscous, upper

edge dark fuscous, lower whitish-ochreous, terminal segment over 1, slender, acute, ochreous-fuscous, its lower edge, and a minute subapical ring, dark fuscous, the extreme tip, and a faint ring well below the apex, pale ochreous. Thorax greyish-lilac, in the female darker (damaged), patagium whitish-ochreous anteriorly in the two sexes. Abdomen dark fuscous; in the male anal tuft whitish-ochreous; in the female dorsal transverse bands of fine brassy bristles; pecten, and venter, whitish-ochreous, the former spotted with dark fuscous. Legs ochreous, irregularly spotted with dark fuscous, anterior femur dark fuscous towards the base, posterior leg whitish-yellowish, a median patch on the femur, a broad subapical band and dorsal hair-scales of the tibia except at the apex, dark fuscous-purple. Fore wing with veins 8 and 9 out of 7; elongate, little dilated in the male, broader, elongate-triangular in the female, costa gently curved in the male, almost straight in the female, slightly concave in the middle, apex rounded, slightly projecting in the male, termen sinuate, oblique in the male, little oblique in the female. Dark fuscous-purple, female darker. An ochreous-whitish dentoid well-defined spot on costa just beyond middle in the male, almost median in the female, almost reaching the middle of the disc, anterior edge straight, oblique, with the top just above the lower angle of the cell, narrowly truncate, posterior edge inwardly oblique along the upper half, with a moderate blunt projection just above the cell; the lower half of the posterior edge straight, vertical; in the male this spot is somewhat produced posteriorly along the costal edge, in the female not produced, narrowly mixed with ochreous; a small elongate-triangular whitish-ochreous costal spot before the apex. Cilia dark fuscous with a purplish gloss. Hind wing with veins 3 and 5 connate; fuscous with a purplish gloss in the male, dark purplish-fuscous in the female, cilia concolorous, with a narrow white basal line.

Uncus rather long, slightly dilated. Ventrals of its base two moderate, subdentate prominences. Valva slender, long, not dilated, moderately bristled at the apex and along the posterior $\frac{3}{4}$ of the lower edge. Vinculum short, rounded. Anellus very large, dilated above, with two slender curved arms bristled on the top. Aedocagus very stout, large. Cornuti, a sheaf of fine long bristles. (Slide no. 955 D, holotype.)

Ostium strongly modified, an oblique tunnel at the side of an asymmetrical subtriangular plate with the top extended into two rising points with wrinkled surface, densely scaled. Ductus bursae minutely dentate above. Bursa copulatrix moderate. Signum, a hollow tooth with a denticulate edge. (Slide no. 956 D, allotype.)

Araucaria Camp, 800 m, March 29, 1939 (holotype, male), March 7, 1939 (allotype, female). Two specimens.

***Crocantbes anactostola* spec. nov. (figs. 570, 571)**

ἄναξ = king, *στολή* = gown

♂ 20 mm. Head glossy pale yellow, vertex light pink. Antenna light ochreous, pinkish towards the base. Palpus moderately flattened laterally, median segment somewhat roughish beneath, terminal segment moderately thickened, articulation indistinct: pale ochreous, touched with pink towards the base and the apex. Thorax pink mixed with pale ochreous dorsally ? (damaged), collar pale yellow, crimson laterally and in the middle, tegula pale yellow, crimson at the base. Abdomen and legs pale ochreous, anterior and median tinged yellowish, femora and tibiae fuscous-grey above. Fore wing with veins 8 and 9 out of 7; elongate, rather narrow, little dilated, costa moderately curved anteriorly and before the apex, slightly concave in the middle, apex pointed, termen concave above, rounded beneath. Yellow, densely suffused with light orange-crimson, this colour leaving irregular spots of the ground colour: one elongate below fold beyond the base, one slightly oblique at $\frac{1}{4}$ above the middle, a longitudinal larger spot in the middle of the disc, a small ill-defined spot below this and an elongate larger spot just above the dorsum before the end of the cell; an indication of a transverse series of spots across wing at $\frac{4}{5}$, beginning with a large ill-defined spot on costa. Markings suffusedly fuscous, ill-defined; a dark suffused spot on the base of the costa, and some cloudy suffusion occupying the costal half of the basal fourth of the wing, a small yellowish streak on the costa beyond the base; a small subovate rather dark fuscous spot on $\frac{1}{4}$ of dorsum, pointed posteriorly, connected with a suffused narrow dorsal streak along the tornus to the lower $\frac{1}{4}$ of the termen; a tolerably straight transverse fascia from $\frac{1}{3}$ of the costa to the dorsum beyond the middle, slightly extended posteriorly between vein 1b and the dorsum; its anterior edge indefinite, posterior edge rather well-defined, slightly undulate; a fuscous costal streak from this fascia to $\frac{2}{3}$ and an indefinite cloudy subcostal suffusion converging with this streak posteriorly; an irregular transverse outwardly convex fascia from $\frac{2}{3}$ of the costa to the tornus, outwardly oblique, anteriorly dentate on the veins, posteriorly between the veins, almost connected with the second discal stigma which is moderate, suffused, dark fuscous; this fascia is edged along the costa by a small whitish-yellow streak; a narrow ill-defined line running along vein 2 from the tornus to the cell and is connected by faint fuscous irroration with the first transverse fascia above its base; a suffused wedge-shaped subterminal patch occupying less than the posterior fifth of the wing, becoming obsolete towards the costa, leaving a narrow orange-crimson marginal streak in the apex and along the upper $\frac{3}{4}$ of the termen, connected below with the marginal streak from the tornus. Cilia pale yellow, along the costa before the apex fuscous, opposite the apex pinkish, in the tornus fuscous. Hind wing pale yellow, tinged

brighter yellowish-pink in the apex and along the upper half of the termen; cilia pale yellow.

Tegumen broad, rather short. Uncus small, slender, pointed. Anus, a broad flap. Valva strong, dilated, cucullus obliquely truncate, bristled, harpe, a single spike, sacculus not indicated. Vinculum short, truncate. Anellus with two stout bristled projections. Aedoeagus large, stout, narrowed to a point. Cornuti, several pairs of spikes and a denticulate rod. (Slide no. 954 D, type.)

Mist Camp, 1800 m, January 8, 1939. One specimen.

Gonaepa WALKER, 1866

Gonaepa WALKER, 1866, Catal. Lep. Het. Br. Mus., vol. 35, p. 1840. MEYRICK, Gener. Ins., fasc. 184, p. 232, 1925. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 100, 1929. GAEBDE, Lepid. Catal., part 79, p. 511, 1937.

Key to the species of *Gonaepa*

1. Dull dark fuscous scattered with whitish scales, a slender whitish transverse line from beyond $\frac{4}{5}$ of costa *dysthyma* spec. nov.
Markings orange or yellow 2
2. Coppery, margins golden-yellow *josianella* WALKER
Dark purplish-fuscous or purplish-black, not thus edged 3
3. A band from $\frac{1}{3}$ of dorsum reaching $\frac{2}{3}$ across wing, curved to dorsum before tornus, traversed by dark lines on veins *actinis* WALSINGHAM
A broad transverse narrowed band at $\frac{2}{3}$ with a transverse dash above middle *heliarcha* MEYRICK

Gonaepa dysthyma spec. nov. (figs. 577, 581)

δύσθυμος = sad

♂ 19 mm, ♀ 20 mm. Head and thorax purplish-fuscous, face light leaden-grey. Antenna long-ciliate in the male, ciliations 3; purplish-fuscous. Palpus in the male greyish-fuscous, terminal segment dark fuscous, in the female palpus light fuscous. Abdomen dark fuscous, two basal segments more or less suffused with white. Legs sordid pale whitish-ochreous, above suffused with fuscous-grey, whitish-ringed. Fore wing rather narrow, elongate-truncate, gradually dilated, broadest before the termen, costa moderately curved anteriorly, straight in the middle, rounded before the apex, apex broadly rounded, indefinite, termen rounded, slightly scobinate between the veins, little oblique. Dull dark fuscous, with faint purplish tinge in certain lights, but not glossy. An irregular transverse sordid whitish line from beyond $\frac{4}{5}$ of the costa, with its upper third continuous, slightly inwardly oblique, its lower two-thirds narrower, moderately shifted distad, vertical, deeply zigzag, partially interrupted, to the tornus; the wing from the base to this fascia scattered with slender sordid whitish scales, denser below the costa, in the disc

tending to form ill-defined, apparently anteriorly angulate transverse fasciae. Cilia deep fuscous, base whitish, a dark fuscous antemedian fascia, a whitish bar opposite each of the extremities of the transverse fascia. Hind wing dark fuscous, a broad transverse white band occupying less than the central third of wing, from $\frac{3}{4}$ of the costa to the middle of the dorsum, with its upper edge irregularly undulate, with a dark fuscous semicircular or wedge-shaped incision in the middle, posterior edge acutely dentate on the veins; base of the wing paler fuscous, costal edge along the transverse band narrowly fuscous. Cilia dark fuscous, white on the dorsum along the base of the central fascia.

Male genitalia strongly sclerotized. Tegumen dilated above, with the ventral edges denticulate. Uncus short, slender, curved. Gnathos blunt, porrect, a denticulate process at each side of its base. Valva narrow, cucullus much narrowed, clavate, ending in an erect spike. Vinculum small. Anellus cylindrical. Aedoeagus moderately long, straight. Cornuti, a series of some 14 spikes and fine denticulations. (Slide no. 937 D, holotype.)

Ostium modified. Seventh sternite with a median denticulate furrow, edged laterally by strong dentations; ventrad of this furrow two erect horns with a dilated base; limen proper, a moderate transverse band. Ductus bursae with a moderate straight cestum, reaching $\frac{3}{4}$ towards the bursa, lower half of ductus denticulate, forming a sac above the bursa copulatrix, which is spheroid, with a finely denticulate wall. Signum, an elongate, minutely denticulate flat sclerite. (Slide no. 938 D, allotype.)

Rattan Camp, 1150—1200 m, February 4, 1939 (holotype, male), February 6, 1939 (allotype, female), February 8—16, 1939. Three males, two females. A conspicuous species, easy of recognition by the white markings, that are exceptional in the genus.

Periphorectis MEYRICK, 1925

Periphorectis MEYRICK, 1925, Gener. Ins., fasc. 184, p. 235. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 168, 1929. GAEDE, Lepid. Catal., part 79, p. 513, 1937.

Periphorectis disperma spec. nov. (fig. 608)

δ i = two, σ πέσμα = seed

♀ 13 mm. Head and palpus pale golden-ochreous, glossy. Antenna pale ochreous, brown-ringed. Thorax pale golden-ochreous, medianly suffused with fuscous, shoulder dark fuscous. Abdomen pale ochreous. Legs pale ochreous more or less mixed with fuscous. Fore wing elongate, rather narrow, not dilated posteriorly, costa curved anteriorly, straight posteriorly, apex obtusely pointed, termen gradually rounded, oblique. Pale ochreous, irrorated and suffused with purplish-fuscous, less so towards

the costa anteriorly. Stigmata rather large, round, with the edge slightly suffused, fuscous-black, first discal at $\frac{1}{3}$, slightly above middle, second at $\frac{3}{5}$, in the middle; a moderate blackish-fuscous suffusion along the base of the costa. Cilia pale golden-ochreous, opposite the apex with two ill-defined brownish parting lines. Hind wing whitish-ochreous, the apical fourth more distinctly tinged pale ochreous, the apical and the terminal edges faintly tinged smoky-grey. Cilia pale golden-ochreous.

Ostium simple. Ductus bursae broad, cestum a broad, straight band. Bursa copulatrix moderate, ovoid. Signum rounded, dentate. (Slide no. 968 D, type.)

Mist Camp, 1800 m, January 3, 1939. One specimen. Vein 9 in right fore wing separate, vein 4 out of 2.

Sphenocrates MEYRICK, 1925

Sphenocrates MEYRICK, 1925, Gener. Ins., fasc. 184, p. 234. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 207, 1929. GÆDE, Lepid. Catal., part 79, p. 512, 1937.

Key to the Papuan species of *Sphenocrates*

1. Purplish-fuscous with whitish markings *aulodocha* MEYRICK
- Greyish-fuscous, devoid of markings *neptis* spec. nov.

Sphenocrates neptis spec. nov. (fig. 584)

νήπιος = sober

♂ 13.5 mm. Head and palpus whitish-ochreous, face glossy, collar yellowish (damaged), terminal segment of the palpus greyish. Antenna fuscous-grey, scape tinged yellowish. Thorax fuscous-yellowish ? (denuded). Abdomen dark fuscous, genital segment paler. Legs pale ochreous, anterior tibia and all tarsi greyish. Fore wing elongate, rather narrow, moderately dilated, broadest at $\frac{4}{5}$, costa hardly curved at the base, straight in the middle, slightly bent towards the apex, apex obtusely pointed, termen hardly curved, oblique. Light fuscous-greyish, glossy, basal $\frac{2}{5}$ more fuscous tinged, with a slight purplish gloss, posterior fourth darker fuscous-grey, with a bronze gloss. Cilia pale bronze-fuscous. Hind wing dark purplish-fuscous, cilia dark fuscous.

Tegumen moderate. Uncus erect-triangular, pointed. Gnathos, a semi-circular slender rod, without hook. Valva elongate, curved, costa with a median projection, bearing one large bristle, cucullus subtruncate, moderately bristled; sacculus ill-defined. Vinculum short, rounded. Anellus, a large plate supporting aedocagus ventrally, short-bristled at the sides above, top emarginate. Aedocagus rather short, straight, with a dilated base. (Slide no. 969 D, type.) The genitalia show close affinity to *Crocantbes*.

Sigi Camp, 1500 m, February 27, 1939. One specimen.

Asmenistis MEYRICK, 1925

Asmenistis MEYRICK, 1925, Gener. Ins., fasc. 184, p. 241. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 25, 1929. GAEDE, Lepid. Catal., part 79, p. 528, 1937.

***Asmenistis semifracta* spec. nov.**

♀ 11 mm. Head, thorax dull greyish-fuscous. Antenna light ochreous, scape and apical seventh of the flagellum suffused with blackish-fuscous. Palpus light ochreous. (Abdomen missing.) Legs pale ochreous, posterior tibia and the base of the tarsus irregularly marked with suffused fuscous rings. Fore wing elongate-ovate, rather narrow, broadest at $\frac{2}{3}$, costa slightly curved at base, straight posteriorly, apex subobtuse, termen broadly rounded, oblique. Pale fuscous evenly suffused with deeper fuscous-tawny; basal half of the costa as far as the middle of the disc suffused with darker lilac-fuscous. Markings fuscous-black: first discal stigma rather large, irregularly rounded, at $\frac{1}{3}$ well above the middle of the disc; a straight vertical series of some five irregular small dots on the dorsum at $\frac{3}{5}$ of the wing length, reaching over $\frac{3}{4}$ of the wing breadth, dots becoming larger towards the dorsum, surrounded with yellowish scales, these scales more distinct posteriorly and towards the middle of the disc. Cilia fuscous. Hind wing whitish-fuscous, becoming paler towards the base, darker towards apex. Cilia pale fuscous.

Sigi Camp, 1500 m, February 26, 1939. One specimen. Identification of the genus is somewhat dubious as the single specimen lacks the hind legs and the posterior part of both antennae.

Lecithocera HERRICH-SCHÄFFER, 1853

Lecithocera HERRICH-SCHÄFFER, 1853, Schmiett. Eur., vol. 5, p. 45. STAUDINGER, Stett. Ent. Ztg., vol. 20, p. 239, 1859. HEINEMANN, Schmiett. Deutschl., vol. 2, part 1, p. 361, 1870. CHRISTOPH, Bull. Soc. Nat. Mosc., vol. 1, p. 33, 1882. STAUDINGER & REBEL, Cat. Lep., vol. 2, p. 175, 1901. CARADJA, Bull. Soc. Sci. Bukar., vol. 10, p. 155, 1901. REBEL, Ann. Hofmus. Wien, vol. 19, p. 361, 1904. MENDES, Broteria, vol. 3, p. 248, 1908. MEYRICK, Journ. Bomb. Nat. Hist. Soc., vol. 20, p. 443, 1910. Gener. Ins., fasc. 184, p. 237, 1925. SPULER, Schmiett. Eur., vol. 2, p. 343, 1910. JANSE, Checklist S. Afr. Het., p. 183, 1917. TURATI, Atti. Mus. Civ. Milano, vol. 65, p. 69, 1926. FLETCHER, Mem. Agr. Ind., Ent., vol. 11, p. 123, 1929. GAEDE, Lepid. Catal., part 79, p. 516, 1937.

Tiriza WALKER, 1864, Catal. Lep. Het. Brit. Mus., vol. 29, p. 790.

Titana WALKER, 1864, *ibidem*, p. 813.

Tirasia WALKER, 1864, *ibidem*, p. 817.

Patouissa WALKER, 1864, *ibidem*, p. 820.

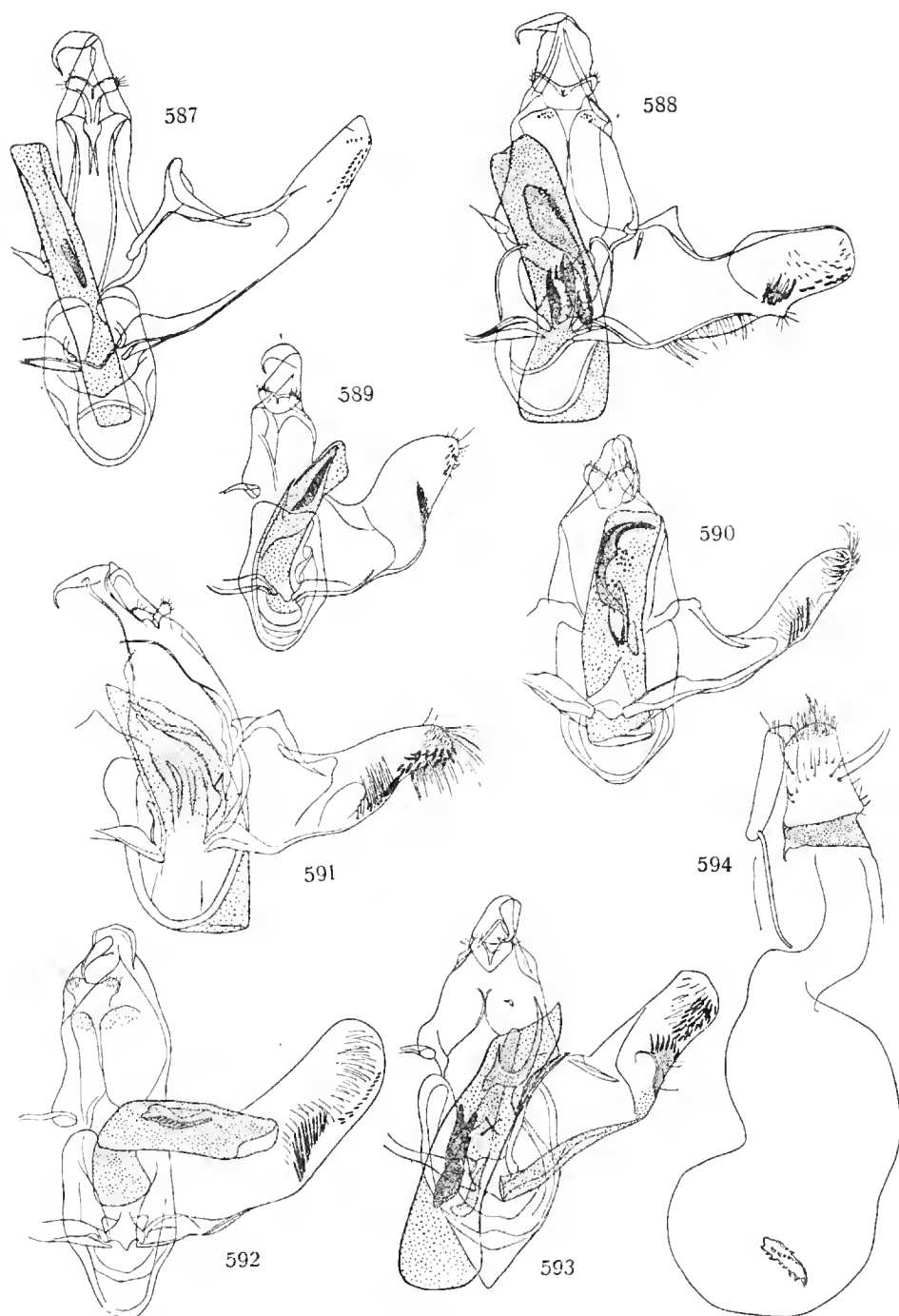
Andusia WALKER, 1866, *ibidem*, vol. 35, p. 1836.

Sivcata WALKER, 1866, *ibidem*, p. 1837.

Sarisophora MEYRICK, 1904, Proc. Linn. Soc. N.S. Wales, vol. 29, p. 403. Gener. Ins., fasc. 184, p. 236, 1925. ZERNY, Eos., vol. 3, p. 478, 1927. FLETCHER, Mem. Agr. Ind., Ent., vol. 11, p. 197, 1929. GAEDE, Lepid. Catal., part 79, p. 514, 1937.

Macrotona MEYRICK, 1904, Proc. Linn. Soc. N.S. Wales, vol. 29, p. 405.

Stylocera MEYRICK, 1904, *ibidem*, p. 408.



Genitalia of *Lecithocera*. Fig. 587: *nitens* spec. nov., male. Fig. 588: *abrasa* spec. nov., male. Fig. 589: *baryoma* spec. nov. male. Fig. 590: *capra* spec. nov., male. Fig. 591: *rhinoceros* spec. nov., male. Fig. 592: *lutescens* spec. nov., male. Fig. 593: *induta* spec. nov., male. Fig. 594: *purpurea* spec. nov., female.

Apparently STAUDINGER & REBEL, 1901, were the first to sink *Sarisophora* as a synonym of *Lecithocera*, the former genus differing only in the absence of vein 5 in the hind wing from the latter. Later SPULER (1910), and some others adopted this view, but most authors, including MEYRICK himself, regarded *Sarisophora* as a distinct genus.

Although the uniting of these two genera may appear less desirable out of practical reasons in view of the large size of the genus *Lecithocera*—together with *Sarisophora* it contains more than 250 species!—we are compelled to follow the above example on account of the striking similarity of the male genitalia in the Papuan species described, and recorded below. We must also include *hemitoma* spec. nov., with veins 3 and 4 in the hind wing originating out of 5—which might suggest a generic difference—but otherwise closely related to other species, and *rhabdostoma* spec. nov., with vein 5 in the hind wing originating out of the stalk of 3 and 4, which situation must be regarded as intermediate between that in *Lecithocera* and in *Sarisophora*. *L. nitens* spec. nov., at last, has veins 3 and 4 in the hind wing separate and distant. The male genitalia of these and other species differ only in slight details which, however significant specifically, can be of no generic importance.

Male genitalia with tegumen moderately sclerotized, subconical. Uncus moderate, erect-triangular, with the base soldered with the top of the tegumen, with the apical half articulating with the basal half, representing a small bulbate body with a narrow, acute, beak-like, curved point. An inverted-triangular, cardiform or deeply bilobate pad, finely bristled above, which can easily be mistaken for the socii, is attached to the dorsal surface of the tegumen; its homology is not clear. Gnathos absent. Transtilla absent. Valva often broad at the base or moderate, costa sometimes angulate at the base, concave in the middle, cucullus often distinctly separate, with a series of blunt short bristles along the ventral edge, their number and arrangement specifically different: sacculus hardly indicated, but the ventral edge of the valva often projecting beyond the middle and bearing a comb or a sheaf of strong spikes, of variable number and arrangement. Vinculum strong, clongate, thickened dorsally, point sub-triangular or rounded. Anellus, a weak plate. Aedoeagus elongate or stout. Cornuti, combs of spikes, sometimes large crochets.

Female genitalia with the ostium rather broad, limen mostly a simple straight, transverse band. Ductus bursae simple, rather short. Bursa copulatrix large, clongate. Signum small, moderately dentate, elongate or rounded.

Key to the Papuan species of *Lecithocera*

1. Hind wing with veins 3 and 4 distant *nitens* spec. nov.
Hind wing with veins 3 and 4 connate or stalked or out of 5 2
2. Hind wing with veins 3 and 4 out of 5 *hemitoma* spec. nov.
Not thus 3

3. Hind wing with vein 5 out of the stalk of 3 and 4 *rhabdostoma* spec. nov.
Hind wing with vein 5 separate or absent 4
4. Hind wing with vein 5 absent 5
Hind wing with vein 5 present. 9
5. Irrorated with rather dark fuscous; terminal segment of palpus in male over 1, flattened; hind wing with a strong pecten on upper edge of cell. *induta* spec. nov.
Not thus. 6
6. Orange-yellow or deep ochreous-yellow, more or less speckled with darker 7
Pale, yellowish-ochreous, whitish-ochreous or brownish-ochreous 8
7. Short dark suffusion on base of costa, a dark irroration from $\frac{3}{4}$ of costa to $\frac{3}{4}$ of dorsum *praeceptrix* MEYRICK
No such suffusion on costa, a transverse streak from second discal stigma not reaching dorsum *tameoides* MEYRICK
8. Pale yellowish-ochreous, first discal stigma elongate; hind wing with a narrow elongate mark in centre. *scrtacta* spec. nov.
Pale whitish-ochreous or brownish-ochreous, sometimes brighter towards costa anteriorly; markings not thus *liberalis* spec. nov.
9. Markings distinct: light and well-defined, or darker than ground colour and suffused 10
Markings absent except stigmata, and sometimes a slender streak on end of cell, or a row of dots along termen, fore wing unicolorous, sometimes costa suffused darker or lighter, or veins are lighter 20
10. Markings light, much paler than ground colour, well-defined 11
Markings darker than ground colour, suffused 19
11. A light streak along costa from base to apex, sometimes extending to middle of wing. 12
Markings not thus. 17
12. Leaden-grey, costal streak narrow, without projections *deloma* DURRANT
Fuscous, costal streak moderate or broad, often with a projection. 13
13. Costal stripe ochreous-yellow, with a streak of ground colour along basal fifth of costa and another from before $\frac{1}{2}$ or $\frac{3}{4}$ *strepsicrena* MEYRICK
Costal stripe sometimes only with a short streak of ground colour at base of costa 14
14. Costal stripe with a triangular projection below. 15
Costal stripe with a blunt prominence below. 16
15. Antennae whitish-ochreous, with slender fuscous rings. Costal streak moderate, light ochreous-yellowish, with one median prominence. *staurophora* MEYRICK
Antennae whitish-ochreous, not ringed. Costal stripe broad: rather bright ochreous, lower edge and projections white: two blunt prominences anteriorly, a pointed-triangular projection on closing vein, and a moderate dilatation before apex. *spinigera* spec. nov. (part)
16. Thorax whitish-ochreous, posterior extremity fuscous; termen slightly rounded *coleasta* MEYRICK
Thorax dark fuscous, a streak parallel to edge of tegula and tegula except shoulder whitish-ochreous; termen sinuate below apex, slightly rounded beneath *spinigera* spec. nov. (part)
17. A postmedian direct white transverse fascia. 18
A fine curved dentate transverse line at $\frac{3}{4}$ *invariella* WALKER
18. Postmedian fascia with anterior edge straight *stelophanes* MEYRICK
Postmedian fascia with anterior edge towards costa inwardly convex. *sublunata* spec. nov.
19. A fuscous-black streak along lower edge of cell and fold to edge of wing; a narrow terminal line with three inward projections *strigosa* DURRANT
A small suffusion on base of dorsum, a subtriangular suffused patch on dorsum

- before tornus crowned with second discal stigma, and an elongate suffused spot on costa opposite this *perspicua* spec. nov.
20. Hind wing grey 21
Hind wing whitish or pale ochreous, sometimes more or less suffused with grey towards apex 25
21. Dark or rather dark purplish-fuscous. 22
Fuscous, lilac-ochreous or greyish-ochreous, without purple tinge. 23
22. Discal stigma well-marked *prudens* MEYRICK
Discal stigmata not perceptible *purpurea* spec. nov.
23. Antenna ochreous-whitish with fragments of slender dark rings, giving impression of sparse black dotting; hind wing rather broad *brachyptila* spec. nov.
Antenna ochreous-whitish, without dots or rings, sometimes with a greyish tuft at $\frac{1}{5}$ 24
24. Antenna tufted at $\frac{1}{5}$; head whitish-grey-ochreous; thorax fuscous.
. *squamifera* MEYRICK
Antenna without tuft; head lilac-ochreous, sides of crown ochreous-whitish; thorax light lilac-ochreous *autodyas* MEYRICK
25. Brownish-fuscous, veins narrowly marked with whitish-ochreous streaks, costa anteriorly suffused with whitish-ochreous *abrassa* spec. nov.
Veins not marked with light colour. 26
26. Antenna fuscous. Palpus in male very long, curved and projecting over vertex, much thickened with dense scales *rhinoceros* spec. nov.
Antenna light ochreous or whitish, sometimes moderately infuscated towards base or dark-ringed, but not fuscous 27
27. Antenna whitish finely black-ringed, apical eighth black *submersa* spec. nov.
Antenna not thus 28
28. Palpus dark fuscous-grey *capra* spec. nov.
Palpus light ochreous, sometimes slightly mixed with grey 29
29. Hind wing with veins 3 and 4 coincident *baryoma* spec. nov.
Hind wing with veins 3 and 4 stalked 30
30. Fore wing with veins 4 and 5 almost connate; palpus in male modified
. *pachystoma* spec. nov.
Fore wing with veins 4 and 5 hardly approximated; palpus in male normal (in *lutescens*; in other species male unknown) 31
31. Fore wing with stigmata large, conspicuous; a row of suffused dots along termen *megalosperma* spec. nov.
Fore wing with stigmata small; no terminal dots. *lutescens* spec. nov.

Lecithocera nitens spec. nov. (figs. 586, 587)

♂ 21 mm, ♀ 20 mm. Head and thorax glossy purple-fuscous. Antenna light ochreous, slightly thickened in the male. Palpus purplish-fuscous, apex of the median segment and the apical half of the terminal, light ochreous. Abdomen light brownish-ochreous, venter dark fuscous. Legs light ochreous, more or less infuscated, dark fuscous above, except articulations, posterior leg little infuscated, tibia clothed with appressed long bristly hairs above. Fore wing with veins 2 and 3 stalked, 4 separate, 8 and 9 out of 7, 7 to termen; elongate, dilated, costa curved anteriorly, slightly curved before the apex, apex obtusely pointed, termen sinuate, oblique. Deep fuscous-purple, becoming paler purplish-fuscous beyond

the cell, border of the first colour ill-defined, apparently strongly concave. Base of costa suffused with dark purple; stigmata small, dull blackish, the first stigma considerably elongate, the second transverse, with longitudinally extended base. Cilia sordid pale ochreous-fuscous with bronze gloss, a pale-ochreous basal line and a suffused fuscous antemedian band. Hind wing with veins 3 and 4 distant, 5 approximated; thinly scaled, pale ochreous suffused with light fuscous with a faint purplish gloss; cilia sordid whitish-ochreous with a smoky antemedian suffused band.

Tegumen long, rather narrow. Dorsal pad almost T-shaped. Valva with a large projection at base of costa, cucullus narrow, three rows of small bristles. Ventral edge of valva simple. Aedoeagus long, rather slender. Cornutus, a moderate, possibly scobinate rod. (Slides no. 952 D, holotype, no. 953 D, paratype.)

Eighth sternite, an erect-triangular sclerotized plate. Ostium simple. (Slides no. 971 D, allotype, no. 972 D, paratype.)

Top Camp, 2100 m, January 30, 1939. Lower Mist Camp, 1400—1600 m, January 6, 1939 (holotype, male), January 8—9, 1939. Mist Camp, 1800 m, January 7, 1939. Sigi Camp, 1500 m, February 19, 1939 (allotype, female). Two males, four females.

Lecithocera abrasa spec. nov. (figs. 588, 603)

♂ 24 mm, ♀ 25 mm. Head and antenna whitish-ochreous, face infuscated, apex of the antenna in the male and the tip in the female blackish. Palpus in the male with the median segment strongly dilated, roughish along the lower edge, with an obtuse projecting tuft at the apex beneath, dark fuscous, apex whitish-ochreous: terminal segment over 1, curved backward, dilated, flattened laterally, rather smooth, broadest below the middle, pointed, whitish-ochreous slightly irrorated with pale tawny; in the female normal, pale ochreous, the median segment strongly suffused with dark fuscous, less so towards the upper edge and the apex. Thorax light fuscous with longitudinal whitish-ochreous median and lateral stripes, a spot anteriorly and the tegula, light fuscous-purple. Abdomen light ochreous, venter, except medianly, suffused with fuscous-blackish. Legs pale fuscous, femora infuscated, anterior leg dark fuscous above except the articulations of the segments. Fore wing with veins 2 and 3 stalked, 8 and 9 out of 7, 7 to the termen; elongate, little dilated, costa curved towards extremities, straight in the middle, apex subobtuse, slightly produced, termen sinuate, moderately oblique. Deep brownish-purple, all veins narrowly lined with whitish-ochreous; costa narrowly whitish-ochreous, base of the costa, apex and termen suffused with dark fuscous-purple; discal stigmata indefinite. Cilia pale ochreous, a broad antemedian and an apical interrupted purplish-fuscous shade. Hind wing

with veins 3 and 4 stalked; in the male thinly scaled anteriorly, the cell covered with moderate closely appressed pale ochreous hairs directed downward, in the female normal; whitish-ochreous with a golden gloss, moderately suffused with light fuscous posteriorly, this suffusion darkest in the apex and along the termen. Cilia pale ochreous, with a faint brighter ochreous subbasal shade, and an interrupted subapical fuscous fascia.

Dorsal pad broadly elongate. Valva moderately broad, costa angulate at the base, concave in the middle; cucullus not separated, slightly narrowed, truncate, bristles stout, in two irregular rows; ventral edge with a moderate bristled projection at $\frac{2}{3}$, and a larger bristled tumescence opposite this. Vinculum with a rounded top. Aedoeagus large, stout, dilated at the base. Cornuti, a conical plate, densely denticulate above. (Slide no. 976 D, holotype.)

Limen, a transverse weak plate with the upper edge slightly thickened, the extremities acute, rising. Signum rounded. (Slide no. 977 D, allotype.)

Moss Forest Camp, five km northeast of Lake Habbema, 2800 m, October 13, 1938 (holotype, male), October 16, 1938 (allotype, female). One male, two females.

Lecithocera rhinoceros spec. nov. (fig. 591)

♂ 19 mm. Head and thorax pale ochreous, slightly mixed with light fuscous. Antenna with the scape pale ochreous with a bronze gloss, flagellum dark bronze, its subapical ninth ochreous-whitish, ringed with bronze, its apical ninth dark fuscous-bronze, tip whitish. Palpus modified, extremely large, flattened laterally, and much dilated: basal segment elongate, smooth, median segment strongly recurved, reaching to above the vertex, much dilated by smoothly appressed hairs, roughly projecting along lower, and apical edges, terminal segment 1, strongly dilated, appearing conical in lateral aspect, subobtuse, curved caudad, and almost reaching tips of the tegulae; purplish-fuscous, the lower edge of the basal segment, and the basal $\frac{2}{3}$ of that of median segment suffused with light ochreous, apex of the terminal segment ochreous-whitish. Abdomen sordid pale ochreous, anal tuft ochreous. Legs light ochreous, infuscated, anterior and median tarsi ochreous-ringed, posterior tarsus pale ochreous. Fore wing with veins 2 and 3 short-stalked, 4 and 5 connate, 8 and 9 out of 7, 7 to termen; elongate, broadest at $\frac{3}{4}$, costa curved towards extremities, more so anteriorly, almost straight in middle, apex pointed, termen sinuate, moderately oblique. Light tawny-fuscous, suffused along the costa and on posterior $\frac{2}{5}$, with brownish-purple; extreme edge of the basal third of the costa light tawny-fuscous; an ill-defined moderate subcostal attenuated streak of dark purplish-grey suffusion from the base to the middle; edge of the posterior purplish area very faint from the middle of the costa to $\frac{2}{3}$ of the dorsum; discal stigmata distinct, fuscous-

black, moderate; first stigma just beyond $\frac{1}{3}$, slightly submedian, a little elongate, second just before $\frac{2}{3}$, median, rounded; a faint spot of ochreous suffusion on the costa before the apex, extending over the cilia. Cilia brownish-purple along the costa to the apex, glossy pale ochreous mixed with fuscous along the termen, with the basal third dull light ochreous, not obscured with fuscous. Hind wing with veins 3 and 4 stalked, 5 closely approximated; pale greyish-fuscous, cilia glossy pale whitish-fuscous, basal third duller, light ochreous.

Dorsal pad small, with elongate points. Valva moderately broad at the base, costa angulate, cucullus narrowed, bristles large, in three rows; ventral edge of the valva rounded-prominent, a large, stout spike at $\frac{2}{3}$. A pointed sclerotized projection at the base of the valva. Vinculum rounded. Aedoeagus very stout, narrowed. Cornuti, irregular pointed sclerites. (Slide no. 962 D, type.)

Araucaria Camp, 800 m, March 21, 1939. One specimen.

***Lecithocera capra* spec. nov. (fig. 590)**

♂ 16 mm. Head and thorax light tawny with a lilac gloss, shoulder dark fuscous. Antenna whitish-ochreous, faintly ringed with light fuscous, basal $\frac{2}{5}$ and the scape dark fuscous, tip fuscous. Palpus with the median segment reaching above the base of the antenna, much thickened, triangularly dilated with scales that are roughly projecting along its lower edge, terminal segment over 1, strongly recurved and projecting over the vertex, slender, subacute, base dilated and flattened below by a compressed keel along the inner side, becoming very narrow towards the apex; basal and median segments dark greyish-fuscous, terminal segment tawny with a pale lilac gloss, base somewhat infuscated. Abdomen pale ochreous tinged brighter ochreous dorsally. Legs pale ochreous, anterior and median leg strongly irrorated and suffused with dark fuscous, apices of tarsal segments pale ochreous. Fore wing with veins 2 and 3 short-stalked, 8 and 9 out of 7, 7 to just below apex; elongate, hardly dilated, costa curved at the base and before the apex, straight in the middle, apex subobtusate, termen slightly sinuate, oblique. Rather pale ochreous-tawny, irrorated and suffused with fuscous. An ill-defined, darker fuscous, lilac-tinged suffusion occupying less than the costal half of the wing except the extreme costal edge and posteriorly reaching as far as vein 10; an ill-defined narrow streak of the same colour along the closing vein to the dorsum before the tornus becoming paler below; posterior area beyond this streak suffused with fuscous, which suffusion is lighter than that below the costa; discal stigmata dark fuscous tinged lilac; first elongate, suprmedian, at $\frac{1}{3}$, second rounded, obscured by the above mentioned transverse streak, just above middle before $\frac{2}{5}$. Cilia pale golden ochreous with an ante-median and a subapical fuscous line. Hind wing with veins 3 and 4 stalked;

whitish-ochreous, posterior fourth suffused with light fuscous, this colour extending over the posterior half of costa. Cilia ochreous-whitish, basal half somewhat brighter ochreous.

Dorsal pad large, erect-triangular. Valva with costa angulate at the base, coneave in the middle; cucullus narrow, bristles long, the ventral edge slightly rounded, with a moderate longitudinal comb of spikes. Vinculum angulate dorsally, with a broadly triangular top. Aedoeagus stout, truncate, straight. Cornuti, a pair of plates, fine denticulations, and a large crochet. (Slide no. 987 D, type.)

Mist Camp, 1800 m, January 8, 1939. One specimen.

Lecithocera induta spec. nov. (fig. 593)

♂ 13.5 mm. Head light fuscous, edges of the frons dark fuscous, face whitish-ochreous. Antenna pale ochreous (apices broken), scape dark fuscous below. Palpus with the median segment flattened laterally, dilated towards the apex, with a moderate projecting apical tuft, terminal segment 1, rather broad, with closely appressed scales, strongly flattened laterally, apex subacute; pale ochreous. Thorax fuscous. Abdomen ochreous-fuscous, tinged greyish, anal tuft pale ochreous. Legs pale ochreous, femora fuscous, base of the tibiae, spurs, and tarsal rings, dark fuscous. Fore wing with veins 2 and 3 stalked, 7 and 8 stalked, 7 to termen; elongate, not dilated, pointed, costa curved anteriorly, straight in the middle, slightly prominent at $\frac{1}{5}$, apex rather pointed, termen straight, oblique. Rather light purplish-fuscous, indistinctly irrorated with darker purple-fuscous, veins apparently very narrowly striped darker than the ground colour. Markings dark purple-fuscous. An ill-defined cloudy suffusion on the base of the wing from below the costa, and a short blackish-fuscous streak on the base of the costa; first discal stigma small, at $\frac{1}{3}$, well above the middle of the wing; second represented by an ill-defined small transverse suffusion on the closing vein (at $\frac{3}{5}$), vertically continued to a point somewhat above the dorsum. Cilia pale ochreous mixed with fuscous except along the basal third, along costa not obscured, brighter ochreous. Hind wing with veins 3 and 4 stalked, 5 absent; with termen gradually rounded; pale whitish-fuscous; a faint median longitudinal, sordid pale fuscous suffusion, slightly darker than the ground colour, extended in the apex; a strong pecten of fine hairs directed downward along the upper edge of the cell, another pecten formed by smoothly appressed hairs directed upward, along the fold. Cilia pale whitish-fuscous.

Genitalia with dorsal pad V-shaped. Valva rather moderate; cucullus not separated, narrowed, subtruncate bristles in a broad patch; ventral edge of the valva obtusely angulate, a triangular sclerite at $\frac{2}{3}$, edged posteriorly by a curved series of moderate bristles. A sclerotized pointed projection at the base of the valva. Vinculum strong, top obtuse. Aedoeagus

very large. Cornuti, a group of blunt stout spikes, an acute spike, a few bristles and a large crochet. (Slide no. 967 D, type.)

Rattan Camp, 1200 m, March 6, 1939. One specimen.

Lecithocera brachyptila spec. nov. (fig. 585)

βραχύς = short, *πίλον* = wing

♀ 13 mm. Head pale fuscous tinged lilac, sides of the crown and the face whitish-ochreous. Antenna paler ochreous, flagellum slightly thickened towards the base, with narrow dark fuscous bands above. Palpus with the median segment dilated with appressed scales, apex rounded: dark fuscous, terminal segment under 1, slender, acute: pale ochreous. Thorax light fuscous, lilac-tinged, suffused with darker fuscous medianly and on apex. Abdomen light fuscous. Legs suffusedly dark fuscous, posterior leg pale ochreous. Fore wing with veins 2 and 3 stalked, 7 and 8 stalked, 7 to termen; elongate, moderately dilated, costa moderately curved anteriorly, less so before the apex, straight posteriorly, apex subobtuse, termen slightly rounded, oblique. Pale greyish-ochreous, densely, and evenly suffused with lilac-fuscous, irrorated with dark fuscous, this irroration becoming coarse posteriorly. Costa narrowly suffused with ochreous; discal stigmata blackish-purple, small, first elongate, beyond $\frac{1}{3}$ just above middle, second larger, rounded, at $\frac{2}{3}$ just below middle; a slender fuscous terminal line. Cilia light ochreous, except along the costa, their posterior half mixed with fuscous. Hind wing with veins 3 and 4 coincident; fuscous-grey, apical third suffused with darker fuscous, cilia light ochreous.

Limen, a moderate, long transverse band. Ductus bursae narrow, with a spinose wall. Signum small, subovate. (Slide no. 981 D, type.)

Sigi Camp, 1500 m, February 27, 1939. One specimen.

Lecithocera purpurea spec. nov. (fig. 594)

♀ 17 mm. Head and thorax purple-fuscous, sides of crown whitish-ochreous. Antenna pale ochreous, flagellum with small fuscous bands above, apical tenth dark fuscous, apex pale ochreous. Palpus pale ochreous, median segment tinged tawny, its dorsal half dark fuscous, terminal segment slightly infuscated towards the base. Abdomen rather light fuscous. Legs pale ochreous, more or less infuscated, tarsi dark ringed only, posterior tarsus pale ochreous. Fore wing with veins 2 and 3 stalked, 8 and 9 out of 7; elongate, dilated, costa gradually moderately curved anteriorly, straight posteriorly, apex obtusely pointed, termen rounded, moderately scalloped, appearing slightly concave above, considerably oblique. Fuscous-purple, becoming dark purple along costa anteriorly, with bright purple gloss; costal edge narrowly light ochreous. Cilia pale ochreous, posterior half whitish-ochreous, costal cilia brighter light

ochreous, barred with fuscous, a broad purplish-fuscous bar opposite the apex. Hind wing with veins 3 and 4 stalked; glossy pale ochreous-greyish, cilia glossy pale ochreous, becoming whitish-ochreous towards their tips.

Limen, a weak rather broad transverse band with finely sculptured surface. Signum elongate. (Slide no. 980 D, type.)

Mist Camp, 1800 m, January 4, 1939. One specimen.

Lecithocera hemitoma spec. nov. (figs. 597, 601)

$\epsilon\mu$ = half, $\tau\omicron\mu\acute{\eta}$ = cut

♂ 18.5—22 mm, ♀ 21 mm. Head orange-ochreous. Antenna pale yellow with dark fuscous rings, towards the apex infuscated. Palpus in the male with the median segment triangularly dilated with roughish scales projecting in a tuft at the apex beneath, less dilated in the female, terminal segment in the male over 1, recurved at the base, flattened laterally, with a short fringe of scales posteriorly except towards the base, apex subacute, terminal segment in the female normal, slender, acute. Orange-ochreous, median segment suffused with dark fuscous except towards the apex, in the female the tip of the terminal segment dark fuscous. Thorax deep orange-ochreous, shoulder and basal half of the tegula suffused with purplish-brown, less so in the female. Abdomen pale-ochreous, anal tuft in the male tinged brownish. Legs pale ochreous, anterior leg except the tarsus blackish-fuscous, median more or less infuscated, brighter ochreous, anterior and median tarsus pale ochreous, dark-ringed. Fore wing with veins 2 and 3 stalked, 4 connate, 7 and 8 stalked; 7 to termen, 9 approximated; elongate, dilated, costa moderately sinuate, apex subobtusate, termen gently rounded in the male, almost straight in the female, oblique. Orange-ochreous, with a more or less distinct lilac gloss, in the male posterior half irrorated with lilac-brown, more so towards the costa and beyond the cell, sometimes this irroration much reduced; in the female more regularly irrorated throughout with light brownish; anterior half of the costa with a suffused broad blackish-lilac or greyish-lilac streak, sometimes this is little developed; discal stigmata rather large, irregular, formed by a black irroration: first elongate, just before $\frac{1}{3}$, supramedian; second larger, rounded, well beyond $\frac{3}{5}$, just above middle, connected with tornus by an oblique curved streak of black irroration becoming less dense and somewhat broader below, terminated anteriorly by the course of vein 2. Cilia light ochreous slightly mixed with brownish, more so in the tornus. Hind wing with vein 5 from angle, 3 and 4 out of 5; whitish-ochreous, posterior third tinged pale orange-ochreous, cilia pale orange-ochreous.

Dorsal pad rounded-cordiform. Valva broad at the base, curved, ventral edge angularly projecting with a long transverse comb of strong bristles; cucullus as broad as the half of the valva, ventral bristles in one row.

Vinculum erect, dorsally rounded, top triangular. Aedoeagus moderate, top sclerotized, with a subapical crochet. Cornuti, a pair of spikes. (Slide no. 983 D, holotype.)

Genital segment moderately sclerotized, tergite oval. Limen, a slender rod curved downward at the sides, forming a ring around the ostium, surrounded by numerous fine dentations. Colliculum, a moderate plate, coiled and compressed dorso-ventrally. Ductus rather short, simple. Bursa copulatrix small, simple. (Slide no. 984 D, allotype.)

Moss Forest Camp, five km northeast of Lake Habbema, 2800 m, October 30, 1938 (holotype, male). Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938 (allotype, female), October 11—31, 1938. Six males, one female.

Lecithocera lutescens spec. nov. (fig. 592)

♂ 22 mm. Head and palpus pale ochreous, median segment of the latter suffused with fuscous towards the apex below. Antenna with the scape pale ochreous, flagellum pale tawny ringed pale ochreous (apical half missing). Thorax light ochreous-tawny with a lilae gloss, shoulder and pectus suffused with dark fuscous. Abdomen pale yellowish-ochreous, sides suffused with dark fuscous. Legs pale tawny-ochreous, anterior and median femora infuscated, anterior tibia blackish-fuscous. Fore wing with veins 2 and 3 stalked, 7 to termen, 9 separate; rather broad, elongate-subtriangular, costa curved anteriorly and before apex, obtusely pointed, termen slightly sinuate, oblique. Light ochreous, slightly partially clouded with light brownish, with a few groups of dark fuscous scales; base of the costa suffused with blackish-fuscous; discal stigmata small, distinct, blackish, first elongate, before $\frac{1}{3}$, supramedian, second larger, rounded, just beyond $\frac{1}{2}$, slightly above the middle; an ill-defined oblique transverse dark fuscous suffusion from below the second stigma to $\frac{2}{3}$ of the dorsum; faint cloudy light brownish irroration forming a transverse band halfway between the cell and the termen with a group of scattered dark fuscous scales below the costa and two ill-defined terminal spots: above and below the middle, respectively. Cilia light ochreous. Hind wing with veins 3 and 4 stalked; pale golden-ochreous, cilia pale ochreous.

Dorsal pad with a broad base and short rounded lobes. Valva moderate, eucullus not separated, with one long series of small bristles; ventral edge of the valva with an oblique comb of moderate spikes. Vinculum with the top moderately rounded. Aedoeagus moderate. Cornuti, some three irregular large spikes. (Slide no. 992 D, type.)

Moss Forest Camp, five km northeast of Lake Habbema, 2800 m, October 6, 1938. One specimen.

Lecithocera baryoma spec. nov. (fig. 589)*βαρύς* = heavy, *ὤμος* = shoulder

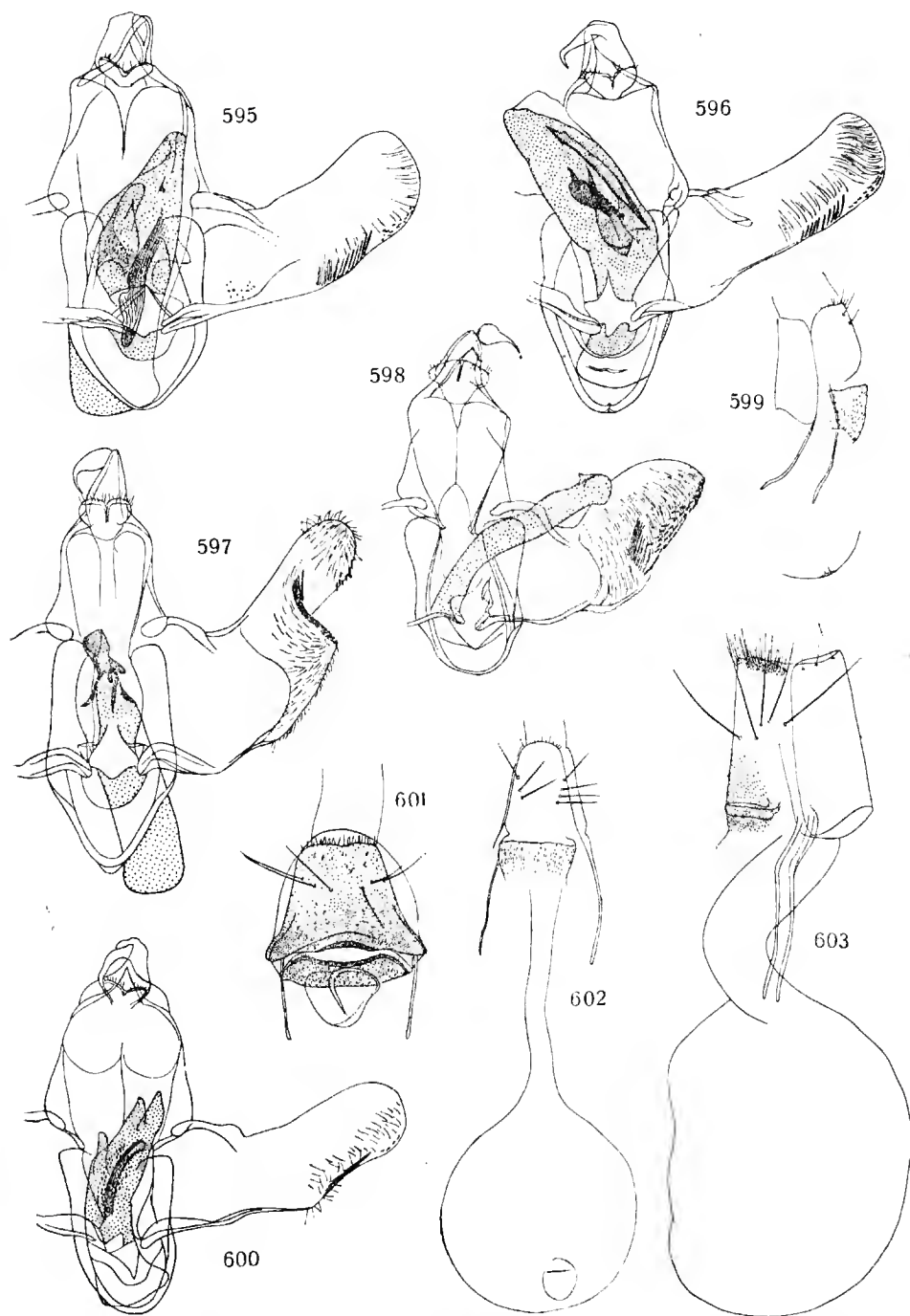
♂ 15 mm. Head and antenna light ochreous. (Antenna missing.) Palpus light ochreous (terminal segment missing). Thorax light ochreous suffused with fuscous, shoulder suffused with dark fuscous. Abdomen light golden-ochreous, sides fuscous. Legs light ochreous, more or less infuscated, knees fuscous, tarsi fuscous ringed with ochreous. Fore wing with veins 2 and 3 stalked, 7 and 8 stalked; elongate, dilated, costa rather curved at the base, gently curved beyond the base, faintly concave in the middle, apex subobtusate, termen straight above, rounded beneath, oblique. Bright ochreous with a purplish gloss; base of the costa suffused with blackish-fuscous; a fuscous-purple irroration becoming less dense posteriorly and extending over the posterior part of the wing, with the anterior edge ill-defined, running approximately from about $\frac{1}{5}$ of the dorsum to the upper angle of the cell, thence to about $\frac{3}{5}$ of the costa; discal stigmata rather ill-defined, first formed by a small dark irroration beyond $\frac{1}{3}$ somewhat above the middle; second, a larger transverse cloudy dark fuscous spot beyond $\frac{3}{5}$. Cilia light golden ochreous becoming paler towards the tornus, more so towards the tips. Hind wing with veins 3 and 4 coincident; golden whitish-ochreous, cilia light golden-ochreous.

Dorsal pad elongate-subovate. Valva broad, bent in the middle, cucullus somewhat narrower, bristles in a small apical patch; ventral edge rounded-prominent, a very oblique moderate comb of spikes. Vinculum erect, top pointed. Aedoeagus rather stout, curved, pointed. Cornuti, a pair of pointed stout spikes. (Slide no. 982 D, type.)

Mist Camp, 1800 m, January 9, 1939. One specimen.

Lecithocera rhabdostoma spec. nov. (fig. 606)*ῥάβδος* = rod, *στόμα* = mouth

♂ 13 mm. Head and thorax sordid ochreous-whitish. Antenna sordid ochreous-whitish, irrorated with pale fuscous, so as to form faint rings, apex grey. Palpus sordid ochreous-whitish, median segment dilated, lower edge and a large subapical spot not reaching the upper edge, dark grey. Abdomen whitish, suffused with tawny. Legs pale ochreous, anterior and median legs infuscated. Fore wing with veins 2 and 3 stalked, 4 separate, 8 and 9 out of 7, 7 to termen; elongate-subovate, costa rather curved anteriorly, little so before the apex, apex pointed, termen sinuate, oblique. Sordid ochreous-whitish, moderately irrorated with fuscous; discal stigmata rather large, somewhat irregular, greyish-fuscous, first ovate, at $\frac{1}{3}$, supramedian, second hardly larger, rounded, before $\frac{1}{3}$, median. Cilia pale ochreous, apical half suffused with grey except towards the tornus. Hind wing with veins 3 and 4 stalked, 5 curved, out of the



Genitalia of *Lecithocera*. Fig. 595: *sublumata* spec. nov., male. Fig. 596: *spinigera* spec. nov., male. Fig. 597: *hemitoma* spec. nov., male. Fig. 598: *liberalis* spec. nov., male. Fig. 599: *megalosperma* spec. nov., female. Fig. 600: *pachystoma* spec. nov., male. Fig. 601: *hemitoma* spec. nov., female. Fig. 602: *submersa* spec. nov., female. Fig. 603: *abrassa* spec. nov., female.

stalk of 3 and 4; ochreous-whitish, paler than the fore wing, suffused with pale greyish, more so towards the apex; cilia ochreous whitish.

Dorsal pad bilobed. Valva rather broad, cucullus separated, but little narrower, asymmetrically rounded, ventral bristles rather short, pointed; ventral edge of the valva with a rounded projection bearing a short series of strong, long spikes. Vinculum moderate, dorsally rounded, top rounded-triangular. Aedoeagus very large, stout, little narrowed. Cornuti, a large patch of numerous spikes and a series of short teeth. (Slide no. 993 D, type.)

Rattan Camp, 1200 m, March 6, 1939. One specimen.

Lecithocera liberalis spec. nov. (fig. 598)

♂ 16—19 mm. Head light golden-ochreous. Antenna pale ochreous ringed with fuscous. Palpus pale ochreous, median segment slightly mixed with fuscous, terminal segment under 1, compressed, rather slender, acute. Thorax light ochreous slightly tinged fuscous, shoulder dark fuscous. Abdomen pale ochreous. Legs pale ochreous, more or less suffused with fuscous, median tibia with three fuscous bands above, posterior tibia clothed above with pale ochreous hairs, below irregularly spotted with fuscous. Fore wing with veins 2 and 3 stalked, 7 and 8 stalked, 7 to termen; elongate-subtriangular, dilated, costa considerably curved anteriorly, little so before the apex, apex obtusely pointed, termen moderately rounded, oblique. Light tawny-ochreous, coarsely and irregularly irrorated with dark fuscous. A moderate spot of dark brown suffusion on the base of the costa, and an irregular irroration forming an ill-defined basal patch with convex edge occupying about one-fifth of the wing; stigmata moderate, cloudy dark fuscous: first discal beyond $\frac{1}{4}$, somewhat elongate, second larger, rounded, on the end of cell (i.e. slightly beyond the middle); dark irroration less developed along the costal half, more dense above the fold, along posterior half of the dorsum, and on the posterior fourth of the wing except along the costa, forming two irregular streaks: below the posterior half of veins 6 and 7, respectively, merging in an ill-defined marginal streak running along the upper half of the termen and around the apex. Cilia rather pale tawny-ochreous, slightly mixed with brown. Hind wing with veins 3 and 4 stalked, 5 absent; glossy pale golden-ochreous. Cilia duller pale ochreous.

Dorsal pad subtriangular. Valva moderately broad, costa concave, cucullus obtusely pointed, little separated, ventrally with two-three rows of short bristles throughout, ventral edge of the valva prominently rounded, with a transverse comb of moderate spikes. Vinculum broadly rounded above, top short, rounded. Aedoeagus long, slender, with a subapical tooth. Cornuti absent. (Slide no. 964 D, holotype.)

Lake Habbema, 3250—3500 m, August 11, 1938 (holotype), August 7, 1938. Letter Box Camp, 3600 m, September 5—11, 1938. Four specimens.

Lecithocera perspicua spec. nov. (fig. 604)

♂ 14 mm. Head, thorax and abdomen light ochreous, the latter densely long-haired, shoulder blackish. Antenna light ochreous, faintly fuscous-ringed, slightly serrulate. Palpus with the median segment blackish, gradually dilated with scales, roughish below and towards the apex; terminal segment light ochreous, slender, flattened laterally, with a shallow longitudinal furrow along the inner side, subacute. Legs light ochreous, knee and tarsus dark fuscous, the latter ringed with light ochreous, anterior leg entirely rather infuscated (posterior legs missing). Fore wing with veins 2 and 3 stalked, almost connate, 7 and 8 stalked, 9 separate; elongate, dilated, costa curved anteriorly, less so before the apex, apex rather obtuse, termen faintly concave above, rounded beneath, oblique. Light golden-ochreous, sparsely speckled below the costa and densely irrorated and suffused beyond the cell, with light tawny-fuscous. A triangular fuscous-blackish dot on the base of the costa, an elongate suffused dark purplish-fuscous spot on the costa beyond $\frac{2}{3}$, with its lower edge slightly extended anteriorly as a transverse suffused streak between veins 10 and 11, hardly reaching the cell; an elongate patch of dense light tawny irroration along the dorsum from about $\frac{1}{6}$ to $\frac{2}{3}$ slightly reaching above the lower edge of cell, narrowed anteriorly and beginning with an elongate suffused fuscous spot on the dorsum; merging posteriorly in a dark purplish-fuscous wedge-shaped suffused oblique patch, with top on $\frac{2}{3}$ of the dorsum, crowned with the transverse blackish second discal stigma, extended below the cell anteriorly to before the middle of wing; posterior edge of this patch rather well-defined, outwardly oblique; first discal stigma conspicuous, fuscous-blackish, semiovate, with the posterior edge excavate. Cilia light golden-ochreous with a faint fuscous antemedian shade. Hind wing with veins 3 and 4 short-stalked, 5 absent; whitish-ochreous, posterior half suffused with light ochreous-tawny, cilia pale ochreous.

Dorsal pad cordiform. Valva broad at base, cucullus narrower, rounded, bristles in two short series; ventral edge of valva projecting, with a bristled knob, a longitudinal and a larger transverse comb of spines with a long sheaf of spines arising between these. Vinculum elongate, angulate dorsally, top rounded, triangular. Aedoeagus large, narrowed. Cornuti, a long series of spines becoming smaller above, and one long spine. (Slide no. 990 D, type.)

Mist Camp, 1800 m, January 9, 1939. One specimen.

Lecithocera sextacta spec. nov. (fig. 605)

♂ 14 mm. Head and thorax pale golden ochreous-yellowish, shoulder suffused with fuscous. Antenna pale yellowish-ochreous, anterior half ringed with brownish, rings becoming gradually fainter posteriorly.

Palpus pale ochreous-yellowish, median segment with a moderate roughish tuft at the apex below; upper edge, and a suffused oblique median band, dark fuscous. Abdomen sordid pale ochreous, tinged brownish. Legs sordid light ochreous, more or less infuscated above, tarsi light-ringed. Fore wing with 2 and 3 stalked, 7 and 8 stalked, 7 to termen; elongate, gradually dilated, broadest at $\frac{4}{5}$, costa hardly curved, more so at the base and before the apex, apex rather obtusely pointed, termen little rounded, oblique. Pale ochreous, tinged pale golden-yellowish, costa narrowly suffused with pale yellowish, markings fuscous. A small triangular spot on the base of the costa, top extended posteriorly in a fine short longitudinal line; first discal stigma at $\frac{1}{3}$, irregularly elongate, second forming a suffused transverse spot along the closing vein, connected by a moderate transverse irroration with $\frac{2}{5}$ of the dorsum, with the posterior edge concave; a small longitudinal suffused mark on $\frac{2}{3}$ of the costa; indication of fuscous irroration along the fold beyond its middle. Cilia pale ochreous-yellow. Hind wing with veins 3 and 4 stalked, 5 absent; glossy pale yellowish-ochreous, paler than fore wing, a narrow jet-black short longitudinal streak from the middle of the closing vein, possibly representing a scent-organ. Cilia pale ochreous-yellowish.

Dorsal pad subcardiform, projections truncate. Valva broad at the base, cucullus narrower, curved upwards, three rows of bristles, ventral edge of the valva with a strong sclerotized projection bearing a bristled knob, and a sheaf of very long spines, before base of this a small transverse pecten of spikes, beyond, a larger one. Vinculum large, dorsally rather angulate, top ovate. Aedoeagus long, cornuti, a strong spine and an interrupted series of moderate spikes. (Slide no. 966 D, type.)

Mist Camp, 1800 m, January 8, 1938. One specimen.

***Lecithocera pachystoma* spec. nov. (fig. 600)**

παχύς = thick, *στόμα* = mouth

♂ 19 mm. Head and scape of antenna pale golden-ochreous, flagellum pale ochreous, ringed with fuscous. Palpus with median segment exceeding by far the base of the antenna, triangularly dilated with long hairs roughly projecting at the apex and with a moderate tuft below, terminal segment over 1, much thickened with appressed scales, narrowed towards the apex, compressed laterally, with a deep longitudinal furrow on the inner side, apex roughish; pale ochreous, median segment with an ill-defined grey subapical band, terminal segment ochreous-tawny except at the base, mixed with a few fuscous scales along the anterior edge. Thorax light golden-ochreous-tawny. Abdomen pale ochreous. Legs light golden-ochreous, anterior leg suffused with dark fuscous above (femur little so), except the bases of the tarsal segments. Fore wing with veins 2 and 3 stalked, 7 and 8 stalked, 9 separate; elongate-ovate, little dilated, broadest

at $\frac{3}{4}$, costa curved anteriorly, less so before the apex, straight in the middle, apex obtusely pointed, termen straight above, rounded beneath, oblique. Glossy pale ochreous, moderately irrorated with dark purplish-fuscous except along the costa which is suffused with light golden-ochreous; a light fuscous-purple suffusion on the base of the costa; discal stigmata distinct, blackish-purple-fuscous, first rounded, beyond $\frac{1}{4}$ just above the middle, second larger, rounded, with its posterior edge somewhat irregular; an irregular dark fuscous marginal line from just above the apex to the middle of the termen. Cilia pale golden-ochreous, an interrupted fuscous antemedian line. Hind wing with veins 3 and 4 stalked; whitish-ochreous becoming somewhat brighter ochreous towards the apex, cell with moderate appressed hairs directed downward. Cilia pale golden-ochreous, basal half somewhat brighter.

Dorsal pad subbeardiform, lobes elongate. Valva rather slender cucullus not separated, rounded, some four minute bristles: ventral edge obtusely angulate, with some three-four long spikes. Aedoeagus stout, curved. Cornuti, a curved stout rod and minute dentations. (Slide no. 988 D, type.)

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938. One specimen.

***Lecithoera megalosperma* spec. nov. (fig. 599)**

μέγας = large, *σπέρμα* = seed

♀ 18 mm. Head, thorax and legs, pale ochreous. Antenna pale ochreous, ringed with fuscous. Palpus pale ochreous, median segment moderately irrorated with fuscous except towards the extremities. Abdomen pale ochreous, becoming whitish towards the base. Fore wing with veins 2 and 3 stalked, 7 and 8 stalked, 9 separate; elongate, moderately dilated, costa moderately curved along the anterior half, straight posteriorly, apex subobtuse, termen hardly rounded, oblique. Pale ochreous, costa suffused with pale tawny; coarsely speckled with dark fuscous, and finely, with pale tawny, markings fuscous. A small irrorated spot on the base of the costa, terminated by a short oblique transverse streak; discal stigmata very large, formed by blackish-fuscous irroration, first at $\frac{1}{3}$ slightly above the middle, moderately elongate, narrowed posteriorly, with its anterior edge rounded, posterior pointed; second stigma larger, beyond $\frac{2}{5}$, median, erect-subovate, with edges rather irregular; fuscous speckling forming a denser terminal irregular band, more or less condensed to an apical and a subternal dark spot. Cilia pale tawny-ochreous, apical half paler than basal, separated by a faint interrupted antemedian line of fuscous irroration. Hind wing whitish-ochreous with a golden gloss, cilia paler ochreous.

Ostium hardly modified. Limen, a broad denticulate plate, hardly

differing from the rest of the ventrite. Ductus bursae simple. Signum, a small round plate, with a few teeth. (Slide no. 989 D, type.)

Moss Forest Camp, 2800 m, October 16, 1938. One specimen.

Lecithocera submersa spec. nov. (fig. 602)

♀ 16 mm. Head and antenna whitish, flagellum finely fuscous-ringed, apical ninth black. Palpus with the median segment moderately thickened with appressed scales, with a short apical tuft, terminal segment 1, slender, acute; whitish, median segment suffused with greyish-fuscous, less so at the apex, terminal segment dark greyish-fuscous along the posterior edge and the apical half. Thorax whitish, suffused medianly with pale lilac-fuscous. Abdomen and posterior leg pale ochreous, anterior and median legs dark fuscous, tarsi faintly pale-ringed. Fore wing with veins 2 and 3 stalked, 8 and 9 out of 7, 7 to termen; elongate, little dilated, costa slightly curved anteriorly, faintly convex in the middle, straight posteriorly, apex obtusely pointed, termen straight, considerably oblique. Whitish, suffusedly irrorated along dorsal $\frac{2}{3}$ and beyond the cell throughout with light fuscous-lilac, scarcely so below costa posteriorly; base of the costal edge narrowly dark fuscous; discal stigmata small, distinct, dark blackish-fuscous tinged purple; first stigma elongate, second rounded. Cilia sordid pale fuscous-ochreous, tips whitish, a faint antemedian fuscous shade. Hind wing with veins 3 and 4 very long-stalked; whitish-ochreous with a golden gloss, somewhat brighter towards the apex, cilia pale golden-ochreous.

Ostium forming a short, submembraneous funnel with minutely denticulate wall. Ductus bursae simple. Signum, a small round plate, with a transverse rib. (Slide no. 986 D, type.)

Mist Camp, 1800 m, January 9, 1939 (type), January 8, 1939. Two specimens.

Lecithocera spinigera spec. nov. (fig. 596)

♂ 20 mm. Head and antenna pale ochreous, a broad longitudinal purplish-grey stripe on the vertex, face light fuscous. Palpus pale ochreous, basal segment and median segment except the apex blackish-fuscous, terminal segment under 1. Thorax dark purplish-fuscous, towards tegulae edged with pale ochreous, tegula pale ochreous, shoulder blackish-fuscous, patagium blackish-fuscous, median third pale ochreous. Abdomen light fuscous-ochreous, anal tuft ochreous. Legs light ochreous, anterior leg except the tarsus, median femur and spurs of the posterior leg, blackish-fuscous. Fore wing with veins 2 and 3 stalked or separated, 7 and 8 stalked, 7 to termen, 9 separate; elongate, dilated, costa curved along the anterior half, slightly concave in the middle, apex obtuse, termen straight, moderately oblique. Purple-fuscous. A broad costal stripe from the base to the

apex, light ochreous, becoming whitish-ochreous towards its lower edge, anteriorly just reaching the base of the dorsum, moderately attenuated towards $\frac{2}{5}$ and once more towards the apex, with the lower edge tolerably straight from the base to beyond $\frac{2}{5}$ or with a small subtriangular prominence before $\frac{1}{4}$ of the wing; from $\frac{2}{5}$ running obliquely to above the lower edge of the cell, thence tolerably vertical to its upper edge, from there to the apex, somewhat irregular, moderately prominent below the costa, with a triangular projection on the end of the cell, whitish (or with an obtusely triangular prominence on the upper angle of the cell, moderately concave before, straight beyond this, with a small prominence before the apex: in the specimen from the Lower Mist Camp): an elongate blackish-fuscous-purple spot along basal sixth of the costa. Cilia fuscous with a pale basal line, along costa light ochreous. Hind wing with 3 and 4 stalked; pale purple-greyish-fuscous, glossy. Cilia paler sordid ochreous, apical half ochreous-whitish, with a faint antemedian fuscous shade.

Dorsal pad elongate-triangular, the upper edge slightly notched. Valva rather narrow, eucullus not separated, truncate, a patch of minute bristles, ventral edge of the valva straight, with a moderate comb of spikes beyond middle. Vinculum rounded dorsally, top moderately rounded. Aedoeagus very large, curved. Cornuti, several acute strong selerites of unequal shape and size. (Slides no. 979 D, holotype, no. 978 D, paratype.)

Lower Mist Camp, 1400—1500 m, January 31, 1939. Sigi Camp, 1500 m, February 19, 1939 (holotype), February 20—23, 1939. Rattan Camp, 1200 m, February 6, 1939. Five specimens. Nearest to *L. staurophora* MEYRICK and *coleasta* MEYRICK.

***Lecithocera sublunata* spec. nov. (fig. 595)**

♂ 12 mm. Head and antenna whitish-ochreous, collar greyish-ochreous; flagellum of antenna moderately thickened. Palpus compressed laterally, light yellowish-ochreous, basal segment and $\frac{3}{4}$ of the median segment suffused with fuscous, median segment moderately dilated, rather smooth, terminal segment under 1. Thorax fuscous with a lilac gloss. Abdomen fuscous, with anal tuft sordid pale ochreous. Legs light yellowish-ochreous, anterior leg fuscous above, articulations of the tarsal segments with light ochreous rings, median and posterior femur and spurs fuscous. Fore wing with veins 7 and 8 stalked; costa curved anteriorly, little so before the apex, apex subobtusely, termen sinuate, considerably oblique. Purplish-fuscous; a transverse, slightly inwards-oblique, rather broad pale-ochreous fascia before $\frac{2}{3}$, suffused with light ochreous towards the costa, gradually narrowed towards the dorsum, extended posteriorly along the costa to before the apex, with the anterior edge well-defined, moderately convex, posterior edge ill-defined, irrorated with fuscous. Cilia pale

purplish-fuscous, becoming whitish towards the tornus, in the apex and along the termen with an antemedian and an apical dark fuscous suffused fasciae. Hind wing with veins 3 and 4 stalked; thinly scaled, light greyish-fuscous with a faint purplish gloss; cilia light golden-fuscous, a paler basal line.

Dorsal pad bilobed. Valva moderately broad, cucullus not separated, rounded-truncate, bristles very short, arranged in a ventral group; ventral edge of the valva with a long longitudinal comb of bristles. Vinculum rounded dorsally, with an elongate-triangular top. Aedocagus very large, narrowed. Cornuti, several moderate crochets and a large irregular sclerite with wrinkled surface. (Slide no. 991 D, type.)

Araucaria Camp, 800 m, March 20, 1939. One specimen.

Brachmia HÜBNER, 1818

Brachmia HÜBNER, 1818, Verz. bek. Schmett., p. 419. MEYRICK, Handb. Brit. Lep., p. 605, 1895. Gener. Ins., fasc. 184, p. 248, 1925. Rev. Handb., p. 649, fig., 1928. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 34, 1929. GAEDE, Lepid. Catal., part 79, p. 534, 1937; etc.

Ceratophora HEINEMANN, 1870, Schmett. Deutschl., vol. 2, part 1, p. 325; etc.

Cladodes HEINEMANN, 1870, *ibidem*, p. 330.

Eudodacles SNELLEN, 1889, Tijdschr. Entom., vol. 32, p. 204.

Aulacomima MEYRICK, 1904, Proc. Linn. Soc. N.S. Wales, vol. 29, p. 395.

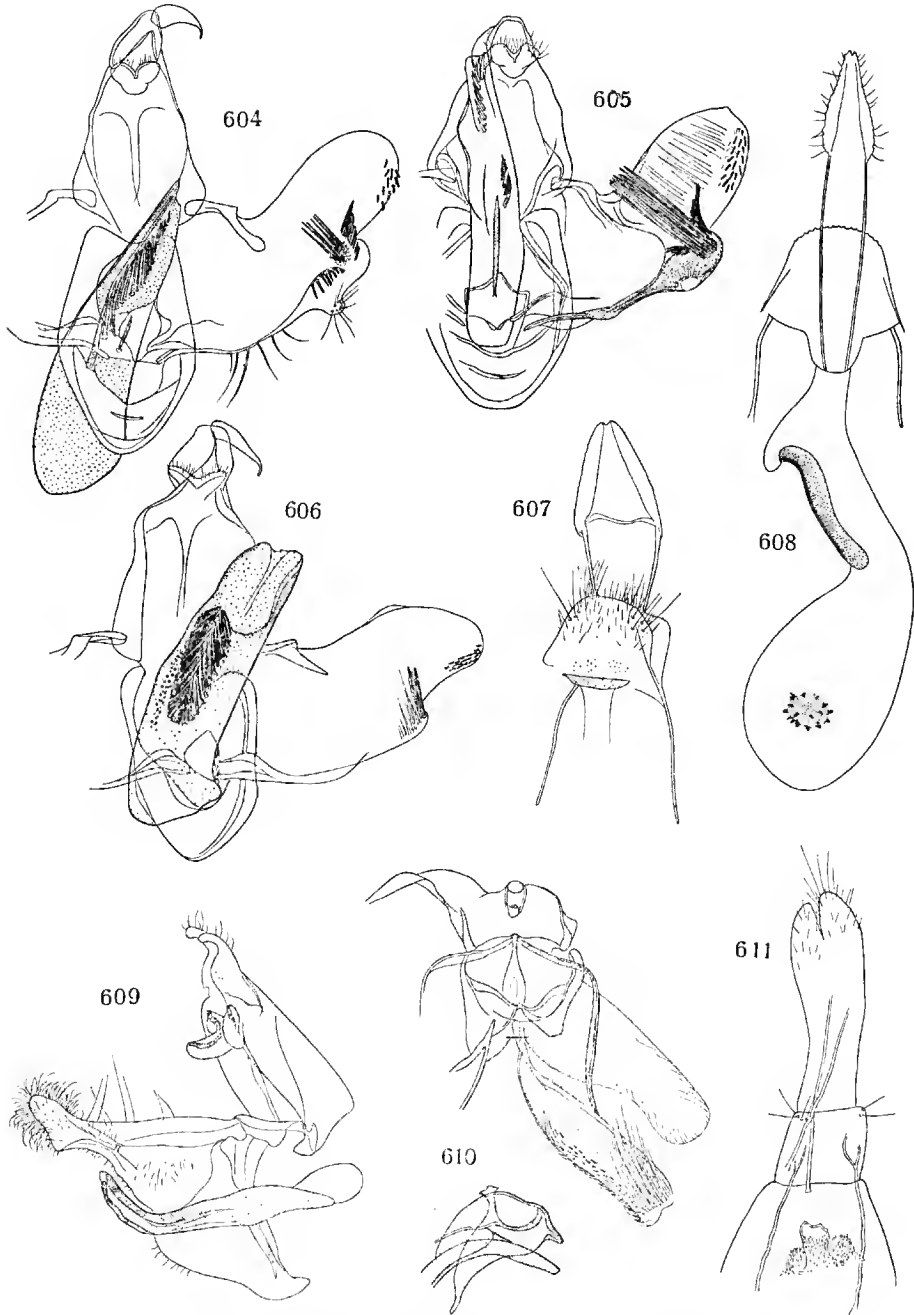
Key to the Papuan species

1. Fore wing with vein 9 out of 7; grey-brownish, darker speckled, no costal markings *philochersa* MEYRICK
- Fore wing with 9 separate; dark fuscous-grey, a small light ochreous spot beyond $\frac{4}{5}$ of costa *subsignata* spec. nov.

Brachmia subsignata spec. nov. (fig. 607)

♀ 10 mm. Head, thorax dark fuscous-grey. Antenna whitish-ringed with dark fuscous-grey, base of the flagellum and scape, blackish (apical part of the flagellum broken). Palpus pale ochreous, median segment towards apex infuscated along the edges, terminal infuscated throughout, upper edge blackish. Abdomen dark greyish-fuscous. Legs pale ochreous, anterior leg, tarsi, and spurs, suffused with greyish. Fore wing with 2 and 3 stalked, 7 and 8 stalked, 9 separate. Dark fuscous-grey mixed with whitish-grey, a few scattered white scales below the costa before the apex; posterior part of the wing beyond the cell suffused with dark greyish-fuscous, edge indefinite; a small suffused light ochreous spot beyond $\frac{4}{5}$ of the costa. Cilia dark greyish-fuscous, a pale basal line and an indication of an antemedian line. Hind wing and cilia fuscous-grey.

Limen, a shallow cup. Caudal edge of the eighth sternite hairy. (Slide no. 985 D, type.)



Genitalia of Gelechiidae and Cosmopterigidae. Fig. 604: *Lecithocera perspicua* spec. nov., male. Fig. 605: *L. sextacta* spec. nov., male. Fig. 606: *L. rhabdostoma* spec. nov., male. Fig. 607: *Brachmia subsignata* spec. nov., female. Fig. 608: *Periphorectis disperma* spec. nov., female. Fig. 609: *Neachandella desis* spec. nov., male. Fig. 610: *Proterocosma dualis* spec. nov., male; below: anellus with aedocagus, lateral aspect. Fig. 611: *idem*, female.

Rattan Camp, 1200 m, March 3, 1939. One specimen. Very near to *B. tesserrata* MEYRICK.

COSMOPTERIGIDAE

According to MEYRICK this rich family of small, elegant species is to be regarded as the nearest related family of the Gelechiidae which statement seems to us to be rather debatable. The genitalia of the Cosmopterygidae are peculiar, and not similar to those in the Gelechiidae. The Cosmopterygidae rather seem to be a strongly specialized off-shoot of the Gelechioid group, with no direct correlation with the modern representatives of the Gelechiidae. They form a much more uniform group. Most species may easily be recognised by the shape, and the regular neuration of the hind wing.

The male genitalia are peculiar. The tegumen and the valvae are very tightly connected at the base. The sacculi of the valvae are more or less separated and sometimes tightly connected with each other, so as to form an unpaired median plate, situated ventrally of the valvae proper. The right valva often possesses a long slender rising process, which is more or less clavate, and bristly at the apex. This process is entirely absent on the left valva.

The separate interconnected sacculi appear also in the family Scaeosopidae. We are inclined to believe that this family is correlated with the present, rather than a modified offshoot of the Oecophorid stock, as is assumed by MEYRICK. Furthermore there may be a connection between the Cosmopterygidae and the Metachandidae (genitalia of which are unknown at present) through the peculiar new genus *Neachandella*, described below.

Key to the Papuan genera of the Cosmopterygidae

1. Fore wing with vein 6 separate 2
 Fore wing with vein 6 stalked with 7 or 8, sometimes also with 5, or vein 6
 is absent 5
2. Antenna with flagellum sinuate, swollen above the basal segment
 *Glaphyrstis* MEYRICK
 Antenna normal 3
3. Fore wing with veins 8 and 9 out of 7. *Melanesthes* gen. nov.
 Fore wing with vein 9 separate 4
4. Fore wing with transverse vein and veins 6, 7 and 8 developed. No pleural
 pencils on the thorax in male *Limnaecia* STANTON (section 2)
 Fore wing with transverse vein between veins 5—9 and basal portions of veins
 6, 7 and 8 obliterate, only marginal parts of the last mentioned veins being
 perceptible; long expansible hair-pencils originating from metapleurao in male,
 directed caudad. *Limnaecia* STANTON (section 1)
5. Fore wing with veins 5 and 8 absent, 6 and 7 stalked; hind wing with veins 4
 and 5 connate *Dynatophysis* gen. nov.
 Not thus. 6

6. Fore wing with veins 5 and 11 absent *Acleracra* gen. nov.
 Fore wing with vein 11 present 7
7. Fore wing with veins 6 and 8 out of 7 (or 6 absent) 8
 Fore wing with veins 7 and 8 out of 6. 9
8. Fore wing with vein 3 absent; terminal segment of palpus I *Dorodoca* MEYRICK
 Fore wing with vein 3 present; terminal segment of palpus over 1
 *Proterocosma* MEYRICK
9. Hind wing with veins 4 and 5 absent, cell open, 3 and 6 out of 7
 *Neachandella* gen. nov.
 Hind wing with normal neuration, veins 4 and 5 present 10
10. Fore wing with raised scale-tufts on the surface *Pyroderces* HERRICH-SCHÄFFER
 Fore wing without raised scale-tufts 11
11. Posterior tibia with bristly projecting scales from base to $\frac{3}{4}$ and with a whorl
 at its apex, basal segment of tarsus with projecting scales above
 *Trissodoris* MEYRICK
 Posterior tibia normally haired above 12
12. Fore wing with vein 2 originating from angle, 4 and 5 almost obsolete
 *Cosmopterix* HÜBNER
 Fore wing with vein 2 remote from angle, 4 and 5 developed *Labdia* WALKER

Neachandella gen. nov. (fig. 612)

Head with appressed scales. Ocellus posterior. Proboscis absent. Antenna $\frac{4}{5}$, in the male filiform, minutely ciliated, scape moderately elongate, flattened, without a pecten. Labial palpus long, median segment sub-ascending, dilated with appressed scales, roughish below, slightly flattened laterally, terminal segment under 1, ascending, smooth slender, pointed. Maxillary palpus minute, drooping. Thorax without a crest. Posterior tibia with fine long appressed hairs above. Fore wing lanceolate, pointed, without raised scale-tufts; 1b furcate, lower edge of the cell weak, 2 weak, from $\frac{5}{6}$, 3 from angle, 3—5 remote, equidistant and parallel, discoidal vein strongly inwardly oblique between them, vertical above vein 5, 6 from the angle, to the termen, 7, 8, 9 out of 6, tolerably equidistant and parallel, 7 to costa, 10 remote, 11 from beyond the middle; a short fringe of scales along the basal part of the upper edge of the cell directed upward, and one above the basal part of vein 1b, directed downward. Hind wing over $\frac{1}{2}$, lanceolate, with a distinctly prominent costal shoulder; 2 separate, simple, from the base to the termen at the middle of the wing; the media as a single vein from the base to the termen below the apex, vein 3 out of the media beyond the middle of the wing, 4 absent, 5 absent, 6 out of the radius halfway between 3 and the termen.

Genotype *Neachandella desis* spec. nov., male.

A novel form of great interest as it combines the characters of two families: the fore wing is of a true *Cosmopterigid* type, while the hind wing shows a strong reduction of neuration along the lines known in the family *Metachandidae*, but this reduction, apparently, has proceeded along these lines even further than in that family itself.

Neachandella desis spec. nov. (figs. 609, 612) $\delta\acute{\epsilon}\sigma\iota\varsigma$ = connection

♂ 18 mm. Head, thorax, abdomen, legs, pale golden ochreous, shoulder infuscated. Antenna pale golden-ochreous slightly speckled with fuscous. Palpus pale golden-ochreous, median segment suffused with dark fuscous. Fore wing lanceolate, costa gently curved anteriorly, slightly concave at $\frac{2}{3}$. Pale golden-ochreous; base of the costal edge suffused with dark fuscous. Markings formed by tawny-fuscous irroration, towards the costa suffused with dark fuscous. An outwardly oblique transverse streak from

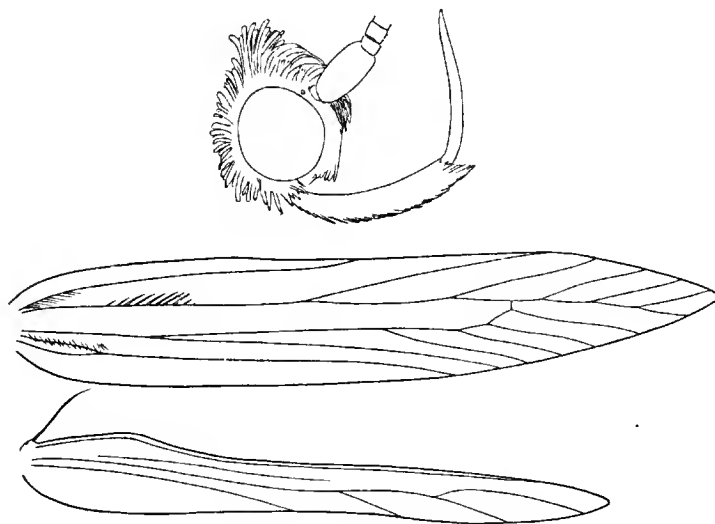


Fig. 612: *Neachandella desis* gen. nov., spec. nov., male, head and wing neuration.

the base of the costa not reaching dorsum, quickly narrowed below; a broad transverse median band occupying the middle sixth of the costa, its edges suffused; anterior edge tolerably straight, vertical, posterior straight and vertical across upper third of disc, thence strongly inwards-oblique and converging with the anterior edge almost at one point on the dorsum; an irregularly triangular patch on the dorsum at $\frac{2}{3}$ of the wing, narrower than the preceding band, anterior edge vertical, upper angle of triangle adjacent to the preceding band at one-third of its posterior edge; posterior edge of the triangular patch somewhat rounded, connected by a dark fuscous suffused streak from above the dorsum rising towards $\frac{5}{6}$ of the costa, with an indefinite fuscous irroration occupying posterior third of the costa, extending to the apex and upper part of the termen, but becoming much paler posteriorly. Cilia (imperfect) pale ochreous mixed with fuscous. Hind wing ochreous-whitish, cilia pale ochreous.

Male genitalia sclerotized. Tegumen higher than broad. Uncus moderate, bifid, apical projections somewhat curved downward, obtuse. Gnathos

robust, rather short, somewhat curved, obtuse, with a strong base. Valva triangular, costa straight, cucullus slender, bristly, with a constricted base and two folds converging anteriorly, sacculus rounded-prominent, about $\frac{1}{2}$. Vinculum small, a short saccus indicated. Aedoeagus slender, curved along its apical third. (Slide no. 1100 D, type.)

Mist Camp, 1800 m., January 6, 1939. One specimen.

Labdia WALKER, 1864

Labdia WALKER, 1864, List Lep. Het. Brit. Mus., vol. 29, p. 823. TURNER, Proc. Roy. Soc. Victoria, vol. 36, p. 68, 1923. FLETCHER, Catal. Ind. Ins., vol. 16, p. 7, 1928. Mem. Agric. Ind., Ent., vol. 11, p. 121, 1929.

Key to the Papuan species of *Labdia*

1. Fore wing with fine longitudinal whitish or bluish streaks 2
Fore wing without such streaks 4
2. A broad pale yellow transverse band from about middle to four-fifths of costa *citroglypta* MEYRICK
A light yellow semiovate patch along termen to before apex 3
3. Supramedian longitudinal streak furcate posteriorly; dorsal streak and discal dot above it absent *helena* MEYRICK
Supramedian streak not furcate; dorsal streak present, a small dot in disc above its posterior extremity *abilincella* VAN DEVENTER
4. Dorsum with a semicircular white spot *albimaculella* VAN DEVENTER
Dorsum without such spot 5
5. A snow-white streak along dorsum, a black dot in tornus, a yellow blotch on termen *chionopsamma* MEYRICK
No dorsal markings except whitish-ochreous suffusion; costal edge posteriorly ochreous-white, forming a blotch on costa before apex *chrysosoma* MEYRICK

Labdia citroglypta MEYRICK, 1928

Labdia citroglypta MEYRICK, 1938, Exot. Microl., vol. 3, p. 386.

Distribution: New Guinea. New Britain, Talesea.

♀ 17 mm (neallotype). Fore wing brown. Longitudinal lines as in the male, except for the subcostal line which is absent; they are more clearly tinged pale blue and finely edged with blackish; the transverse band broader: on the costa from before the middle to $\frac{5}{6}$, on the dorsum from beyond the middle of wing to the apex: golden-white; anterior half of the band suffused with dull light yellow, margin of this suffusion from the middle of the lower edge of the band to about the middle of the costa; anterior edge of the band extended along costa as a narrow golden-white attenuated streak to before the base, below this inwardly oblique, with two small indentations below the middle, lower part sinuate, little oblique; this band including a slender jet-black outwardly convex transverse strigula from the middle of the costa and a silvery-metallic rather irregular

transverse spot on the dorsum at $\frac{3}{5}$ of the wing; a dark fuscous streak along the posterior fourth of the costa, becoming narrow and light brown anteriorly, reaching below to vein 8, before its middle traversed by two golden-whitish transverse small bands. Hind wing dark fuscous, cilia pale yellowish-white. Otherwise similar to the male.

Lower Mist Camp, 1900—1600 m, January 31, 1939 (neallotype, female), February 1, 1939. One male, one female. In both sexes the head is ochreous-whitish with the vertex fuscous, the abdomen tawny-whitish, suffused with ochreous anteriorly. Except these slight differences, the male specimen agrees in all details with the original description.

Dorodoca MEYRICK, 1915

Dorodoca MEYRICK, 1915, Exot. Microl., vol. 1, p. 324. FLETCHER, Catal. Ind. Ins., vol. 16, p. 15, 1928. Mem. Agric. Incl., Ent., vol. 11, p. 70, 1929.

Dorodoca melanostigma spec. nov. (fig. 616)

μέλας = black, στυγμή = a point

♀ 15 mm. Head pale ochreous-yellow. Antenna blackish-fuscous, white-ringed, scape pale ochreous-yellow. Palpus orange-whitish. Thorax pale brownish. Abdomen pale ochreous. Legs pale ochreous tinged with pink, the basal half of the anterior and the median tibia, and tarsi except the apices of the segments, suffused above with blackish, posterior coxa with a black dot above (posterior legs missing). Fore wing narrowly lanceolate. Pale ochreous-pink; a narrow blackish-brown streak along the base of the costal edge; a streak of brownish suffusion along the basal fourth of the dorsum, attenuated towards the extremities, hardly reaching the base of the wing; an irregular spot of fine blackish irroration below the costa at $\frac{1}{4}$, an indication of another much smaller similar mark below the middle of the costa; longitudinal rather broad streaks of deeper brownish-pink suffusion: median, from about $\frac{1}{4}$ to the costa before the apex, and dorsal, from before the middle of the wing along the termen to before the apex; a black dot in the extreme apex, extending as a narrow bar across the costal cilia; a few minute black scales on the termen below the apex. Cilia light ochreous-pink, along the termen and the dorsum pale ochreous-fuscous. Hind wing ochreous-white, glossy. Cilia rather dark fuscous along the costa, around the apex and along the posterior half of the termen, elsewhere yellowish-whitish.

Anapophyses, and especially postapophyses, long. Ostium, a transverse asymmetrical body, orifice with a plicate rim. Bursa copulatrix erect-ovoid. Signa, a series of weak irregular and unequal sclerotized fragments. (Slide no. 1070 D, type.)

Sigi Camp, 1500 m, February 26, 1939. One specimen.

Proterocosma MEYRICK, 1886

Proterocosma MEYRICK, 1886, Trans. Ent. Soc. Lond., 1886, p. 293. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 187, 1929.

Key to the Papuan species of *Proterocosma*

1. White costal and dorsal streaks *marginata* spec. nov.
 White dorsal streak only *dualis* spec. nov.

Proterocosma marginata spec. nov. (fig. 617)

♂ 12 mm. Head, antenna creamy-white, scape below dark fuscous-bronze. Palpus creamy, median segment dark fuscous except the apex, terminal segment with the extreme tip and the lower edge along its apical $\frac{2}{3}$, dark fuscous-bronze. Thorax creamy, tegula dark bronze-brown. Abdomen fuscous-grey, subapical segment whitish, apical tuft ochreous-whitish, venter pale grey. Legs fuscous-whitish, anterior and median tibia with two oblique fuscous stripes. Fore wing lanceolate, rather narrow. Deep brown-fuscous-bronze, markings creamy-white. A longitudinal streak occupying less than the costal fourth of the wing breadth, reaching from well beyond the base to beyond $\frac{5}{6}$, extremities rather abruptly attenuated, anterior acute, posterior less distinctly so; this streak cut by two lines of dark ground colour along the basal halves of the veins 11 and 10, and containing a moderate irregular horizontal streak of the ground colour just below the costa well beyond the middle, and a second shorter similar streak along the posterior part of vein 10; two very small white oblique costal marks between the end of the streak and the apex of the wing; a similar slightly broader dorsal streak from just beyond the base to before the apex, with the upper edge faintly undulate posteriorly, and with a small semioval impression beyond the middle; a moderate horizontal streak of the ground colour penetrating into the white streak from above and strongly narrowing it before the apex; a faint fuscous subdorsal suffusion before the preceding. Cilia creamy, black opposite the apex, pale grey along the dorsum. Hind wing and cilia pale grey.

Tegumen strong, coneave. Uncus with a short bluntly pointed projection. Valva cardinate, narrow, posterior half shaped as a hooked narrow process, ventral angulation of which is set with short rather thick spikes. Anellus process long, slender, clavate, top narrowed, slightly curved. Aedoeagus bent, gradually narrowed, rather slender. (Slide no. 1067 D, type.)

Iebèlè Camp, 2250 m, December 2, 1938. One specimen.

Proterocosma dualis spec. nov. (figs. 610, 611)

♂ 9 mm, ♀ 11 mm. Head, antenna, thorax white, tegula brownish-fuscous. Palpus with the median segment dark grey, terminal segment white. Abdomen fuscous-grey, in the male the sides and the venter silvery-grey. Legs fuscous-white with silvery gloss, anterior tibia and tarsus blackish above. Fore wing brownish-fuscous, a creamy-white dorsal streak, on the posterior third of the wing becoming silvery-white, reaching from the base to the apex, attenuated towards the extremities, slightly dilated towards $\frac{3}{4}$ of the wing, edge well-defined, serrate. Cilia along the costa and around the apex dark fuscous-grey, sordid white elsewhere. Hind wing leaden-whitish, cilia fuscous-creamy.

Anal tube sclerotized. (Tegumen damaged.) Valva cardinate, narrow, its twisted posterior part elongate, truncate, bristly. An elongate sub-membraneous lobe parallel to the valva represents a paired organ which we are not able to identify; perhaps these bags are formed by the membranes of the seventh segment and bearing the coremata. Bases of valvae are tightly connected with each other, so as to form a circular plate, being the sclerotized diaphragma, with a small central opening for the aedoeagus. The latter is moderate, curved, in our figure (dotted) connected with an intricately folded large anellus. (Slide no. 1068 D, holotype.)

Apophyses slightly undulate. Limen, a denticulate concave transverse plate, with a central short rising dilated tube representing the ostium. Ductus bursae and bursa copulatrix simple. (Slide no. 1069 D, allotype.)

Rattan Camp, 1200 m, March 4, 1939 (holotype, male). Iebèlè Camp, 2250 m, November 28, 1928 (allotype, female). Two specimens. Female in damaged condition, but apparently conspecific.

Acleracra gen. nov. (fig. 613)

ἀκλήρως = poor, ἀζρως = marge

Head smooth. Ocellus posterior. Proboscis developed. Antenna $\frac{5}{6}$, filiform, subserrulate, minutely ciliate in the male, scape elongate, slightly clavate and flattened, without a pecten. Labial palpus very long, slender, smooth, recurved, terminal segment 1, acute. Maxillary palpus absent. Posterior tibia smoothly scaled, a few projecting hairs in the middle above. Fore wing lanceolate, 2 from $\frac{3}{4}$, 3 from halfway towards the angle, 4 from angle, 2—4 long, running close together at the base, diverging posteriorly, 4 longest, converging with 6 posteriorly, 5 absent, 7 and 8 out of 6, 9 separate, from angle, 10 from rather before angle, 11 absent. Hind wing $\frac{1}{2}$, narrowly lanceolate, with a costal shoulder, cilia 4, 2—5 remote and parallel, cell open between 5 and 6, 6 and 7 closely approximated towards the base.

Genotype *Acleracra pancarpalea* spec. nov., male.

Allied to *Strophalingias* MEYRICK, differs by the absence of vein 5 in the fore wing and by the presence of all veins in hind wing.

***Acleracra pancarpalea* spec. nov. (figs. 613, 618)**

πav = entirely, *καρφαλέος* = dry

♂ 16 mm. Head pale ochreous-yellow, face shining greyish mixed with yellowish-white. Antenna dark fuscous ringed with white, scape pale yellowish towards the base. Palpus fuscous, median segment tinged ochreous. Thorax pale ochreous-yellow. Abdomen fuscous. Legs fuscous, tarsi somewhat pale-ringed, posterior tibia whitish-yellow, with a faint postmedian, and an apical, fuscous band, tarsus pale fuscous-yellowish, segments with fuscous apical bands. Fore wing lanceolate, strongly narrowed at the base, costa gently curved, apex pointed, termen indefinite, dorsum strongly prominent and rounded beyond the base. Pale glossy ochreous-whitish, upper half as far as the fold from the base to the apex suffused with very pale tawny, dorsal area as far as the fold suffused with pale ochreous-yellow. Basal third of the costal edge narrowly dark fuscous. Cilia along the costa and around the apex very pale golden-tawny, pale fuscous elsewhere. Hind wing pale fuscous-grey, glossy, towards the apex becoming very pale tawny. Cilia very pale fuscous, around the apex faintly tinged pale golden-tawny.

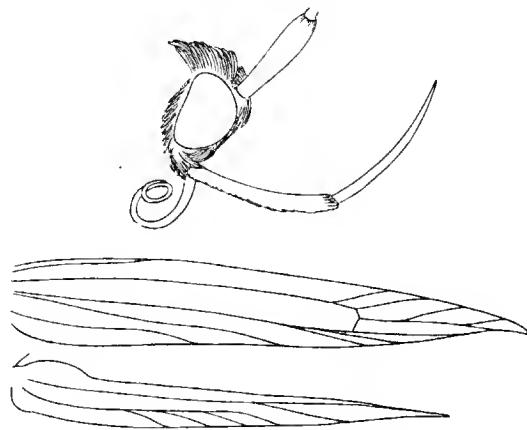


Fig. 613: *Acleracra pancarpalea* gen. nov., spec. nov., male, head and wing neuration.

Tegumen long. Uncus erect-triangular, long-bristled at the sides. Gnathos porrect, top slightly truncate, denticulate above. Valva without a basal projection, with the costa sinuate, cucullus curved, bristly, sacculus distinctly separate, short (under $\frac{1}{2}$), weakly bristled. Anellus small, anellus lobes erect-ovate, with a few apical bristles. Aedoeagus huge, cylindrical. Cornutus, a blunt spike. (Slide no. 1078 D, type.)

Lake Habbema, 3250—3300 m, July 30, 1938. One specimen. Male genitalia Gelechioid, also with some likeness of the Xyloryctid type.

Dynatophysis gen. nov. (fig. 614)*δυνατός* = strong, *φύσις* = nature

Head smooth. Ocellus posterior. Proboscis developed. Antenna $\frac{3}{4}$, seape elongate, flattened, not dilated, without a pecten. Labial palpus very long, recurved, slender, smooth, median segment hardly thickened towards the apex, compressed, terminal segment 1, acute. Maxillary palpus vestigial. Anterior leg normal (median and posterior legs missing). Fore wing without raised scale-tufts, lanceolate, narrow; 1b furcate at base, 2 from angle, very short, 3 approximated, short, 4 long, moderately converging with 6 posteriorly, 5 absent, 6 and 7 stalked, 7 to costa, 8 absent, 11 from the posterior fifth of the cell. Hind wing $\frac{1}{2}$, narrowly lanceolate, with a costal shoulder, cilia 4; 2—4 remote, parallel, 4 and 5 connate, cell open between 5 and 6, 6 and 7 closely approximated towards base (seemingly connate).

Genotype *Dynatophysis perichrysa* spec. nov., female.

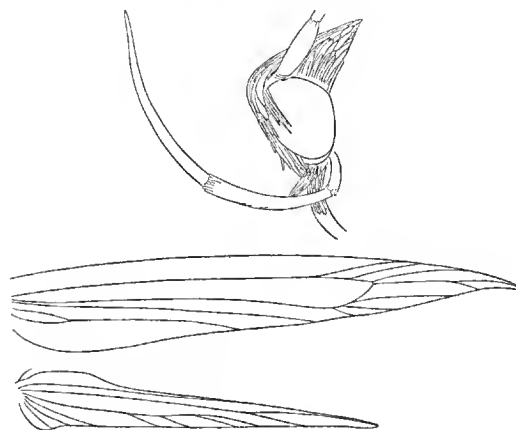


Fig. 614: *Dynatophysis perichrysa* gen. nov, spec. nov., female, head and wing neuration.

Allied to *Aeronectris* MEYRICK and *Helcanthica* MEYRICK, perhaps nearest to the latter, differing from both by the connate veins 4 and 5 in the hind wings, furthermore from the first genus also by the normal anterior legs, and by the stalked veins 6 and 7 in the hind wing, from the second genus by the absence of raised scale-tufts in the fore wings. The characters of the median and the posterior legs must remain undescribed, but the genus is sufficiently characterised already by the peculiar neuration of both the fore, and the hind wings.

Dynatophysis perichrysa spec. nov. (figs. 614, 619, 620)*περί* = around, *χρυσός* = gold

♀ 11 mm. Head shining dark fuscous, frons and face whitish. Antenna ochreous-whitish. Palpus pale golden-yellowish. Thorax pale ochreous-

yellow, shining, appearing darker in certain lights, pectus whitish. Abdomen fuscous. Legs (imperfect) whitish, suffused with grey. Fore wing lanceolate, strongly narrowed at the base, costa gently curved anteriorly, apex acute, termen indefinite, dorsum strongly prominent and curved beyond the base. Grey-fuscous with golden gloss, faintly dusted with ochreous. A rather narrow pale yellow streak along anterior two-thirds of the costa; a deeper yellow streak along the dorsum from the base to the apex, strongly dilated and reaching to the fold on the basal fifth, gradually attenuate and becoming very narrow posteriorly; anterior two-thirds of the costal edge narrowly dark grey. Cilia along the costa and opposite the apex, pale yellowish, pale fuscous elsewhere. Hind wing glossy whitish-grey, slightly suffused with pale fuscous. Cilia pale golden-fuscous.

Ostium, a short conical cup, ventral rim incised. Signa, a group of some 20 slender spikes, remote from each other, arising from the weak wall of the bursa, and an irregular subtriangular plate in the wall, opposite the spikes. (Slide no. 1077 D, type.)

Mist Camp, 1800 m, January 12, 1939. One specimen.

Melanesthes gen. nov. (fig. 615)

μέλας = black, *ἔσθής* = gown

Head smooth. Ocellus posterior. Proboscis developed. Antenna $\frac{3}{4}$, minutely ciliate in the male, scape elongate, moderately thickened posteriorly, without a pecten. Labial palpi long, recurved, diverging, smooth,

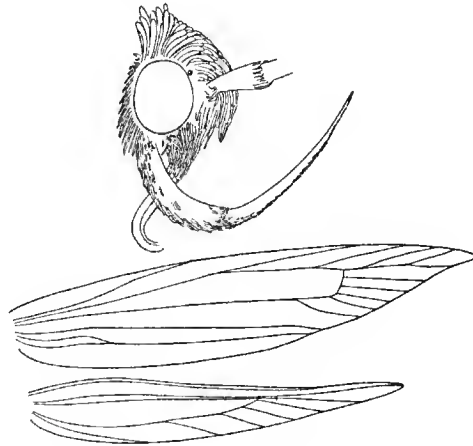


Fig. 615: *Melanesthes disema* gen. nov., spec. nov., head and wing neuration.

median segment slightly thickened, terminal segment $1\frac{1}{3}$, slender, acute. Thorax without a crest. Posterior tibia clothed with rather smoothly appressed bristly hairs, moderately projecting below, more so above, especially opposite the median spurs. Fore wing lanceolate, acute; 1b

fureate at base, 1c strong throughout, cell much narrowed anteriorly, edges almost touching each other along the basal $\frac{1}{4}$; 2 from before angle, 3 remote from angle, 3—6 separate, tolerably parallel and equidistant, 7 to costa, 8 out of 7 at middle, 9 out of 7 at one-fourth, 11 from beyond middle. Hind wing $\frac{1}{2}$, lanceolate, with a costal shoulder, cilia 3; 2—6 separate, tolerably parallel, distances between these veins gradually becoming smaller posteriorly, 6 and 7 closely approximated at base.

Genotype *Melanesthes disema* spec. nov., male.

An interesting novel form, structurally correlated only with *Agonismus* WALSINGHAM, from Hawaii, but widely differing in the shape of the labial palpi. No other genera of *Cosmopterigidae*, except these two, have veins 9 and 8 both stalked with vein 7.

***Melanesthes disema* spec. nov. (figs. 615, 625)**

δ = two, σ η μ α = mark

♂ 15 mm. Head, palpus, scape of antenna and thorax fuscous-black, slightly tinged purplish, flagellum of the antenna sordid pale ochreous finely dotted with blackish, less than its third fourth black, the apical third snow-white. Abdomen dark fuscous. Legs fuscous-blackish, paler towards the base, tibiae and all segments of the tarsi with white rings, posterior leg also with a median white ring on the tibia, and a small dot on the apex of the femur, spurs snow-white. Fore wing lanceolate, costa very gently curved, apex acute, termen very oblique. Bronze-fuscous-black, markings white, faintly tinged yellowish, rather well-defined. A slightly inwards-oblique transverse fascia from $\frac{1}{5}$ of the costa, gradually becoming moderately dilated below, with the anterior edge minutely serrulate, its base on the dorsum almost rounded; a transversely ovate moderately inwards-oblique dot on the dorsum at $\frac{2}{3}$ of the wing length, reaching halfway across the wing. Cilia grey-fuscous, rather dull. Hind wing light fuscous-bronze, becoming subhyaline towards the base and the basal part of the costa, cilia grey-fuscous, along the basal half with faint green opalescence.

Tegumen narrowed, at the base tightly soldered with the valvae proper. Uncus either asymmetrical or damaged in the type specimen; strong, bipartite, right part short, pointed (broken?), left ending in a tortuous filament. Valva entirely separated in a dorsal valva proper of the usual elongate shape, densely and finely bristled, and in a strong saccus which is narrow, curved, with a twisted, flattened and dilated top. Anellus, a small plate. Anellus process very large, long, slightly curved, densely bristled, on a slender stalk. Vinculum, a transverse band. Aedoeagus slender, long, sinuate, narrow and curved posteriorly. (Slide no. 1072 D, type.)

Sigi Camp, 1500 m, February 22, 1939. One specimen.

Limnaecia STANTON, 1851

Limnaecia STANTON, 1851, Suppl. Cat. Brit. Tin., p. 4, WOCKE, in HEINEMANN, Schmett. Deutschl., Kleinschm., vol. 2, part 2, p. 421, 1876. REBEL, in STAUDINGER, Cat. Lep. Pal., vol. 2, p. 187, 1901. SPULER, Schm. Eur., pp. 384—385, fig. 142, 1910. FORBES, Lep. N. York, p. 324, fig. 181, 1924. FLETCHER, Catal. Ind. Ins., vol. 16, pp. 18—19, 1928.

Laverna (partim) STANTON. 1854, Ins. Brit. Tin., pp. 236, 238—239, Manual, vol. 2, p. 399, 1859.

Limnaecia MEYRICK, 1888, Trans. N. Zeal. Inst., p. 172. Handb. Brit. Lep., p. 674, 1895. Proc. Linn. Soc. N. S. Wales, vol. 22, p. 358, 1897. Trans. N. Zeal. Inst., vol. 47, p. 209, 1915. Revis. Handb., p. 652, 1928.

Anybia STANTON, 1854, Ins. Brit. Tin., pp. 244—245, pl. 7, figs. 11a—c. Manual, vol. 2, p. 401, 1859. WALSHINGHAM. Proc. Zool. Soc. Lond., 1891, p. 537, 1892. MEYRICK, Handb. Brit. Lep.: p. 675, 1895. Revis. Handb., p. 652, 1928. SPULER, Schmett. Eur., vol. 2, p. 384, 1910.

Atemaca STAUDINGER, 1870, Berlin. Ent. Zeitschr., vol. 14, p. 317.

Ptilochares MEYRICK, 1886, Proc. Linn. Soc. N. S. Wales, vol. 11, p. 1046.

Opsizyga LOWER, 1903, Trans. Roy. Soc. S. Austral., vol. 27, p. 230.

Erechthiodes MEYRICK, 1914, Ann. Transv. Mus., vol. 4, p. 195.

Callixestis MEYRICK, 1917, Exot. Microl., vol. 2, p. 41.

Thalerostoma MEYRICK, 1917, *ibidem*, p. 42.

This long list of synonyms which is temporarily adopted from MEYRICK and FLETCHER appears to us to be open to doubt. However, we have no sufficient material of this genus from other regions needed for a revision of all the above names, and are compelled to restrict ourselves to a few preliminary remarks.

In the first place we are inclined to remove the three last named genera, viz. *Erechthias*, *Callixestis* and *Thalerostoma* from the above list of synonyms of *Limnaecia*, as these are recorded to be in the possession of a "slight pecten" on the basal segment of the antenna, which important feature is entirely absent in the material at hand.

Furthermore, our material can easily be divided into two groups: those with a decadent neuration of the fore wing: with the cell and the basal parts of the veins originating from it, becoming entirely obliterate towards the upper angle of the cell (section 1); and those with a normal neuration of the fore wing, with the cell closed and all the present veins clearly traceable, which must be the original situation (section 2). What by superficial investigation might appear an incidental anomaly of the typical *Limnaecia* neuration (cf. below), is actually a constant character persisting with great uniformity in all the species concerned, notwithstanding considerable variability of their superficial appearance. The peculiar and interesting character of very long lateral expansible pencils of hairs in the male sex of the species of the section 1, originating from the metapleurae and often reaching beyond the middle of the abdomen, is also constant. We could find references to this character of the following species, which may be included in our "section 1" also: *Limnaecia cybo-*

phora MEYRICK, *L. ochrozona* MEYRICK, *L. eristica* MEYRICK, *L. bisignis* MEYRICK, all from Australia, and *L. microglypta* MEYRICK, from New Hebrides.

Our impression is that in the Papuan and perhaps also in the Australian regions the first group of species is much larger than the second one, the group with the typical *Limnaecia*-characters. Therefore we are inclined to bring this group with "decadent characters" (section 1), in connection with two Australian names: *Ptilochares* MEYRICK, 1886 and *Opsizyga* LOWER, 1903. We tried to obtain material of the genotypes of these genera without the evidence of which any statement would be inopportune, but did not succeed in laying hands on them as far. Therefore we prefer for the time being to maintain the name *Limnaecia* for our entire material, and only to indicate the abovementioned groups without attaching any names to them.

Key to the Papuan species of *Limnaecia*

1. Fore wing unicolorous black-bronze *pichnosaris* MEYRICK
Not thus 2
2. Golden, costal $\frac{4}{5}$ purple, no markings *nephelechalca* spec. nov.
Not thus 3
3. Orange, basal and apical areas and a patch on dorsum blackish-purple, a bluish-purple longitudinal streak in disc *ensigera* spec. nov.
Not thus 4
4. Fuscous, with ochreous-white marginal blotches: two on costa, one on dorsum, one in tornus *tyrotoma* MEYRICK
Not thus, markings not only marginal 5
5. Pale golden-ochreous with longitudinal grey or fuscous lines 6
Not thus, no longitudinal lines 7
6. Four longitudinal lines *parallelograpta* spec. nov.
Two longitudinal lines *bilineata* spec. nov.
7. Small species: 10 mm; glossy fuscous-white, indistinctly streaked with darker along veins *simplex* spec. nov.
Larger species: 16–26 mm; not thus coloured; mostly with distinct transverse markings 8
8. Pale golden with golden-yellow patches: one elongate, above middle of dorsum preceded and followed by a transverse dorsal mark . . . *thiosima* spec. nov.
Not thus 9
9. Light purplish-tawny, markings black and white *megalochlamys* spec. nov.
Creamy-white and bronze-grey, irrorated and marked with fuscous-black . . .
. *nigrispersa* spec. nov.

Section 1. *Fore wing with decadent neuration. Male with pencils of hairs on metapleurae.*

This type may be described as follows.

Head with smoothly appressed scales. Ocellus small, posterior, often not perceptible. Proboscis developed, scaled towards the base. Antenna $\frac{4}{5}$, in the male minutely ciliate, serrulate towards the apex, scape elongate,

slightly flattened at the base, somewhat clavate, without a trace of a pecten. Labial palpus long, recurved, median segment compressed, moderately thickened with smooth scales, in large species hardly roughish anteriorly, in small ones smooth, terminal segment slightly longer or rather longer than the median, slender, smooth, acute. Maxillary palpus small, more or less scaled and obtuse, appressed to the proboscis. Thorax in the male with long expansible pencils of hairs from the metapleurae, directed caudad and reaching to or beyond the middle of the abdomen (in one species these hairs are soldered together from the base to before the apex, so as to form a shining, sclerotized bristle-like flagellum). Posterior tibia variably clothed: with bristly projecting stiff hairs above along the basal $\frac{2}{3}$, and with a wreath of such hairs at the apex, or with a moderate median, and an apical whorl, or only with an apical whorl of such scales, or roughly haired above. Fore wing lanceolate, 1b fureate, 1c strong, cell much narrowed basally, 2 remote from 3 (from $\frac{3}{4}$ — $\frac{4}{5}$ of cell), 3 from rather before the distinct angle or from the angle, 3—5 separate and tolerably equidistant, transverse vein between 5 and 9 obliterate, 6, 7 and 8 obliterate basally, distinct only towards margin, 7 to costa, 9 apparently approximated, 11 from beyond middle of cell. Hind wing lanceolate, in large species $\frac{2}{3}$, cilia $2\frac{1}{2}$, in small ones $\frac{1}{2}$, cilia 4—5; 2—5 separate, tolerably parallel, 6 and 7 stalked, seldom approximated towards the base. Without denuding of the lower surface of the fore wing the constant reduction of the parts of the veins 6, 7 and 8, and of a part of the transverse vein is hardly perceptible, and one can easily mistake this for the typical neuriation of *Limnaecia*: with 7 and 8 stalked, 6 separate (cf. a nice diagram of the neuriation of *L. phragmitella* in SPULER, *Schmett. Eur.*, vol. 2, p. 385, fig. 142, 1910).

The type of section 1 may be regarded as a rather recent decadent offshoot of the type of section 2.

***Limnaecia simplex* spec. nov.**

♀ 10 mm. Head, antenna, thorax pale fuscous-grey. Palpus whitish, anterior edge grey. Pectus shining silvery. (Abdomen missing). Legs glossy fuscous-white, more or less infuscated above, posterior tibia with a median band and an apical whorl of bristly scales, blackish. Fore wing narrowly lanceolate. Fuscous-white with a silvery gloss, along veins indistinctly streaked with somewhat darker fuscous-greyish. Cilia whitish-fuscous. Hind wing glossy fuscous-whitish, cilia whitish-fuscous, faintly purplish-tinged.

Araucaria Camp, 800 m, March 23, 1939. One specimen.

***Limnaecia thiosima* spec. nov. (figs. 621, 622)**

θειον = sulphur, σιμός = oblique

♀ 16 mm. Head pale ochreous. Antenna pale ochreous, ringed with dark

fuscous, apex dark fuscous. Palpus pale ochreous, terminal segment infuscated along the basal $\frac{2}{3}$. Thorax (rubbed) pale ochreous suffused with dark fuscous anteriorly. Abdomen light brownish-ochreous. Legs pale glossy yellow, anterior and median tibiae with an antemedian and a subapical broad blackish-fuscous band, posterior tibia with an antemedian and a median small tuft of raised bristly dark fuscous scales above, all tarsi with two broad blackish-fuscous bands. Fore wing lanceolate, narrowed at the base, costa gently curved. Pale golden. Base of the costa suffused with blackish-fuscous; pale golden-yellow patches: an inwardly oblique fasciate patch at $\frac{1}{4}$ of the dorsum; a longitudinal patch above the middle of the dorsum between the fold and vein 1b, and an erect-subtriangular one on the dorsum beyond $\frac{3}{5}$ of the wing; a golden-purple-violet suffusion extending along the dorsum below the median yellow spot, separating this from the ultimate spot and edging that latter spot, except below. Cilia pale ochreous. Hind wing fuscous-whitish with golden gloss.

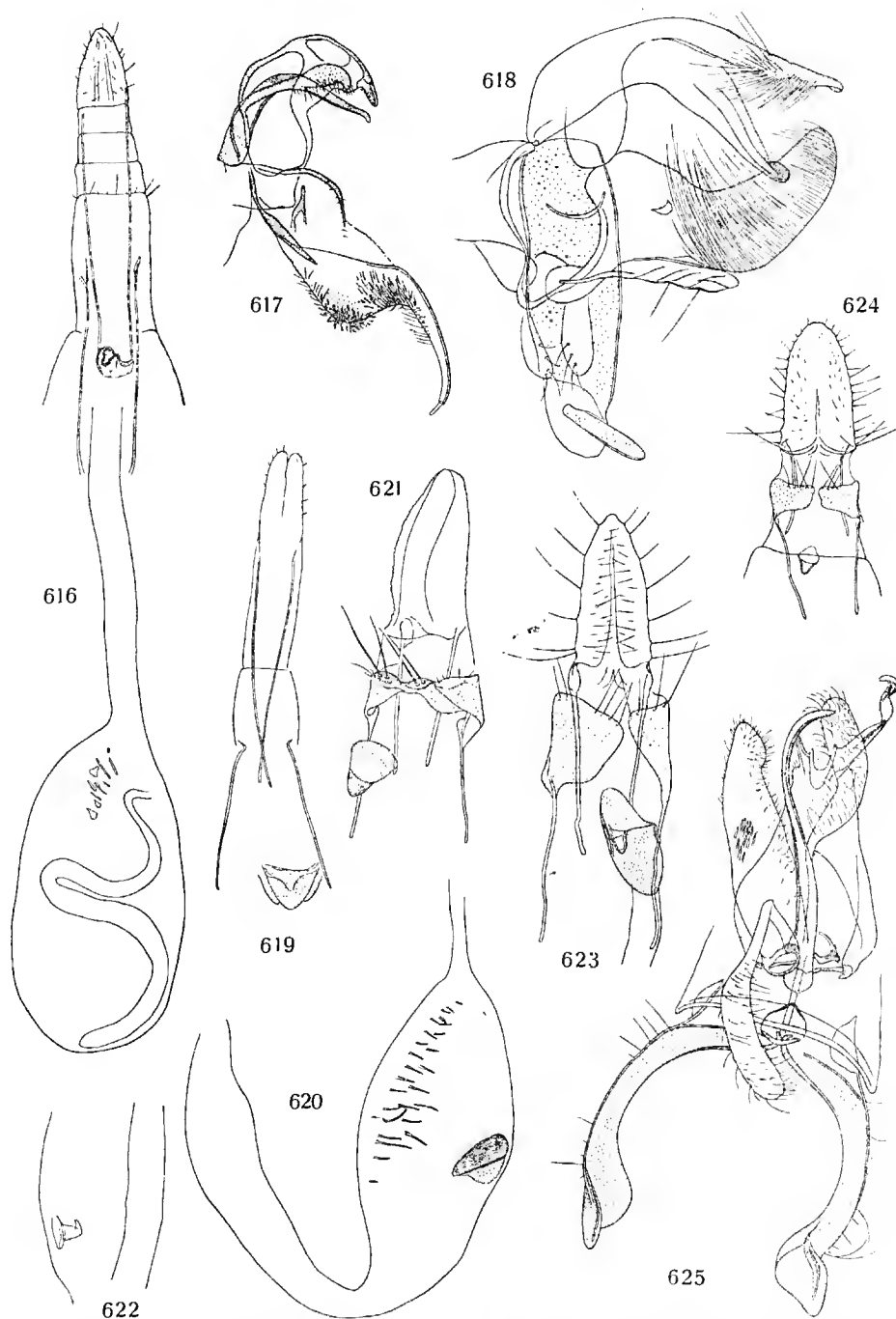
Eighth ventrite with a pair of strong bristles at each side. Ostium, a short funnel-shaped cup, ventral wall slightly sclerotized, rim concave. Ductus bursae simple. Bursa copulatrix simple, elongate, with a long appendix below (in which fits the long collum of the spermatophore, folded in the middle). Slide no. 1099 D, type.

Moss Forest Camp, 2800 m, five km northeast of the Lake Habbema, October 31, 1938. One specimen.

***Limnaecia bilineata* spec. nov. (figs. 626, 630)**

♂, ♀ 10—10.5 mm. Head, palpus, antenna ochreous-whitish, glossy, Thorax deep yellow, narrowly edged with ochreous-whitish. Abdomen ochreous-whitish. Legs light golden-ochreous, all tibiae and tarsi with two fuscous bands. Fore wing narrowly lanceolate, costa gently curved. Golden-ochreous-whitish, dorsal two thirds of the wing as far as the tornus, with an attenuated yellow suffusion; a faint streak of pale fuscous suffusion along the dorsum to the middle of the wing (sometimes very ill-defined), posterior half extended upwards, exceeding the fold and merging in a moderate light fuscous longitudinal streak just above the fold from $\frac{1}{3}$ to the tornus; a second such streak, very narrow, above and parallel to the first, attenuated before the apex of the wing and not reaching this; a narrow suffused dark fuscous streak along the base of the costa. Cilia ochreous-whitish. Hind wing ochreous-white with a silvery gloss, cilia pale fuscous-ochreous.

Tegumen erect. Uncus, a strong erect process. Socii possibly represented by a transverse-trapezoid plate at the base of the uncus with two strong bristles at each side. Valva separated in a dorsal elongate cucullus, sparsely bristled, and in a broad ventral sacculus, both tightly connected with the base of tegumen (cardinate). Vinculum small, triangular, pointed.



Genitalia of Cosmopterigidae. Fig. 616: *Dorodoca melanostigma* spec. nov., female. Fig. 617: *Proterocosma marginata* spec. nov., male. Fig. 618: *Acleracra pancarpalea* spec. nov., male. Fig. 619: *Dynatophysis perichrysa* spec. nov., female. Fig. 620: *idem*, bursa copulatrix. Fig. 621: *Limnaecia thiosima* spec. nov., female. Fig. 622: *idem*, part of bursa copulatrix with signum. Fig. 623: *L. megalochlamys* spec. nov., female. Fig. 624: *L. nephelochalea* spec. nov., female. Fig. 625: *Melanesthes disema* spec. nov., male.

Aedoeagus, a very slender rod. No anellus process. (Slide no. 1065 D, holotype.)

Ostium, a short weak tube with a triangular lower edge. Ductus bursae and bursa copulatrix simple. (Slide no. 1076 D, allotype.)

Mist Camp, 1800 m, January 6, 1939 (holotype, male), January 9, 1939 (allotype, female). Top Camp, 2100 m, January 25, 1939. Three specimens. Closely allied to the preceding species.

***Limnaecia parallelograpta* spec. nov. (fig. 628)**

παράλληλος = parallel, *γράφω* = to draw

♂ 12 mm. Head pale golden-ochreous, slightly infuscated at the sides of the vertex. Antenna pale ochreous, narrowly ringed with fuscous along the basal half above, fourth fifth fuscous, apical fifth with two fuscous bands, scape infuscated. Palpus pale ochreous, terminal segment infuscated along its anterior edge. Thorax light fuscous; with very long, thick whitish lateral pencils, with apical fourth fuscous. Abdomen ochreous-whitish, infuscated above, except towards the base, anal tuft pale ochreous. Legs pale ochreous, anterior and median tibia and tarsus with dark fuscous bands. Fore wing lanceolate, base much narrowed. Pale golden-ochreous, towards the base and the apex slightly suffused with deeper yellowish-ochreous. A semicircular basal patch occupying less than the basal fourth of the costa: pale fuscous, below the fold only posterior edge perceptible; this patch edged by a transverse streak of the ground colour, except towards the costa brighter yellowish-ochreous; four narrow, rather well-defined fuscous longitudinal lines, along their anterior half running parallel to the fold, originating from the basal patch but almost interrupted by the above mentioned transverse streak of the ground colour; first line subcostal, gently sinuate posteriorly, to the termen below the apex; second, suprapical, slightly thickened posteriorly, ending in a longitudinal moderate patch along the middle of the termen; third line plical, fourth, along vein 1c, both narrow, converging in a moderate inwardly oblique suffused fuscous spot on the dorsum at the middle of the wing; about median third of the dorsum from below the fourth line, slightly infuscated. Cilia pale yellowish-ochreous, along the lower part of the termen, in the tornus and along the dorsum, pale ochreous-fuscous. Hind wing glossy pale fuscous, cilia light fuscous.

Uncus with a slender apical hook and strong sclerites at the sides of its base. Valva separated in a bristly elongate cucullus part, with rounded top, and a naked, broader, bluntly pointed sacculus part. Vinculum massive, ovate. Anellus intricately built. Aedocagus moderate, apical third forming a slender hook. (Slide no. 1066 D, type.)

Rattan Camp, 1200 m, February 4, 1939. One specimen.

***Limnaecia nephelochalca* spec. nov. (fig. 624)**

νεφέλη = cloud, *χαλκός* = copper

♀ 12.5 mm. Head, thorax pale fuscous with a golden gloss. Antenna whitish-fuscous, ringed above with blackish-fuscous, scape blackish-fuscous above. Palpus very pale ochreous-fuscous, median segment slightly clouded with grey along the basal half, terminal segment with the anterior and posterior edges very narrowly grey. Abdomen sordid tawny-fuscous, venter pale ochreous. Legs glossy pale ochreous, tibiae and tarsi suffused with fuscous-grey above, pale ringed, posterior tibia with a small median, and an apical tuft of fine bristly short scales. Fore wing lanceolate, costa gently curved. Golden-whitish with strong golden gloss throughout; costal half suffused with pale golden-fuscous, edge of this suffusion irregular, undulate; an attenuated streak of light ochreous-golden suffusion along the dorsum. Cilia along the costa and around the apex dark greyish-fuscous, along the termen ochreous-whitish, elsewhere pale fuscous-grey. Hind wing glossy leaden-fuscous-white, cilia pale fuscous-grey.

Ovipositor elongate, strong. Ninth ventrite forming two medianly narrowed plates, with strong bristles along their caudal edge. Ostium, a small cup. (Slide no. 1064 D, type.)

Mist Camp, 1800 m, January 13, 1939. One specimen.

***Limnaecia nigrispersa* spec. nov. (fig. 629)**

♂ 22 mm. Head glossy whitish slightly mixed with grey, collar mixed with dark grey. Antenna whitish ringed with fuscous-grey, scape dark fuscous-grey. Palpus grey. Thorax whitish densely suffused with dark grey, apical third blackish, tegula whitish mixed with grey. Abdomen ochreous-brown. Legs ochreous-white; anterior leg suffused with blackish except on the articulations of the segments, median knee blackish, tibia with two blackish bands, segments of the tarsus with two broad blackish bands above; posterior tibia blackish below, with a broad median, and an apical greyish band; this tibia with strong bristly projecting scales above from the base to $\frac{3}{4}$ and in an apical whorl, posterior tarsus with two broad blackish bands. Fore wing lanceolate. Creamy-white; partially suffused with pale bronze-grey, irrorated and marked with fuscous-black. An inwardly oblique small subbasal streak from below the costa, ending on the base of the dorsum, and continued along the basal fourth of the dorsal edge: an irregular angulate transverse fascia of the creamy ground colour beyond $\frac{1}{4}$, interrupted at its upper fourth and in the fold, not reaching the margins of the wing, with lower extremity acute; another less distinct creamy fascia from $\frac{3}{5}$ of the costa to the dorsum beyond the middle, interrupted by greyish irroration in the middle; a moderate strongly outwards-oblique rather well-defined streak of creamy ground colour from the costa beyond $\frac{1}{5}$ to the termen below the apex, with the

posterior edge indent in the middle; a suffused blackish streak along the basal fourth of the costa; lower $\frac{2}{3}$ of the wing from beyond the base as far as the second transverse fascia, strongly irrorated with fuscous-black, beyond this fascia irrorated irregularly and less densely; a vertical transverse streak of blackish irroration at $\frac{1}{5}$, enclosing an ill-defined creamy spot in the tornus, extended posteriorly so as to occupy the apical fifth of the wing, thus accentuating the subapical white transverse streak. Cilia sordid creamy, with the posterior half around the apex suffused with grey, indistinct grey bars along the termen. Hind wing creamy, evenly irrorated with pale ochreous-fuscous, glossy. Cilia ochreous-white.

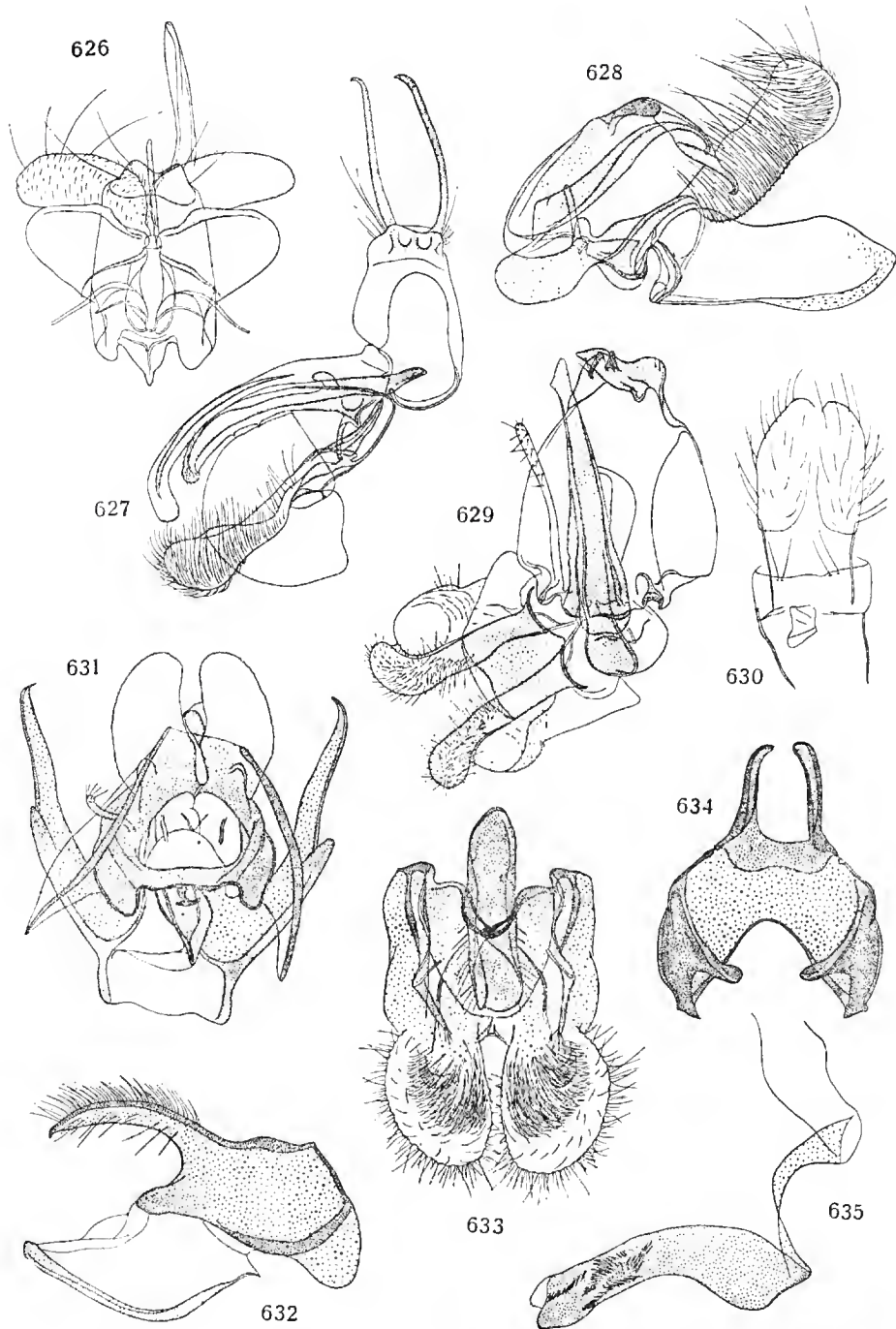
Uncus porrect, strong, pointed, with two short hammer-like processes at the base. Valvae united, cuculli membraneous, distinctly separated along their anterior part from the longer, clavate and bristly sacculi; both valvae connected ventrally by a transverse plate. Anellus process slender, moderately clavate, and bristly along apical half. Aedoeagus narrowed, rather long. (Slide no. 1063 D, type.)

Moss Forest Camp, five km northeast of Lake Habbema, 2800 m, November 3, 1938. One specimen. The male genitalia show a striking similarity to those in *Bathybalia* gen. nov. (family Scaeosophidae, see below).

Limnaecia megalochlamys spec. nov. (fig. 623)

μέγας = large, χλαμός = gown

♀ 26 mm. Head pale ochreous, vertex (damaged) lilac-black. Antenna pale tawny, tips of segments somewhat paler, fourth and fifth basal segments suffused with lilac-blackish. Palpus pale ochreous, median segment suffused with lilac-blackish towards the base, terminal segment suffused with lilac-fuscous throughout, base blackish. Thorax (damaged) pale brownish. Abdomen ochreous-whitish, a row of large lateral blackish patches becoming narrow oblique stripes posteriorly. Legs light golden-tawny, anterior femur and tibia blackish above, basal segment of the tarsus with a blackish longitudinal streak above, median tibia with a black subbasal and a subapical spot above, basal segment of tarsus with a broad blackish median band, posterior tibia with a median and an apical whorl of bristly scales. Fore wing lanceolate. Light purplish-tawny, paler along the dorsum and at the base; a lilac-black attenuated streak along the basal fourth of the costa; a very narrow, strongly outwards-curved semi-ellipsoid transverse ochreous-white line in the disc at $\frac{1}{4}$, not reaching margins of the wing, slightly dilated into a small angular projection in the middle posteriorly; a dark fuscous suffused streak along the fold from beyond the base to the middle of the wing, hardly reaching above the fold, below this extended so as to fill the area before the transverse fascia, narrow beyond this fascia; this streak is marked with ochreous-white as



Genitalia of Cosmopterigidae and Seacosophidae. Fig. 626: *Limnaccia bilineata* spec. nov., male. Fig. 627: *L. ensigera* spec. nov., male. Fig. 628: *L. parallelograpti* spec. nov., male. Fig. 629: *L. nigripersa* spec. nov., male. Fig. 630: *L. bilineata* spec. nov., female. Fig. 631: *Bathybalia microsperma* spec. nov., male, general (ventral) aspect. Fig. 632: *idem*, valva. Fig. 633: *idem*, joined saeculi with eueulli and aedeagus. Fig. 634: *idem*, tegumen and uncus. Fig. 635: *idem*, aedeagus, lateral aspect.

follows: a moderate streak in the fold before the transverse fascia, a dot at the posterior extremity, and a few scattered scales halfway between that extremity, and the transverse streak; a small ochreous-whitish dot on the middle of the closing vein. Cilia pale tawny-ochreous, slightly mixed with darker tawny towards the base, opposite the apex with a basal dot and an apical suffused patch, blackish, dorsal cilia becoming fuscous-greyish anteriorly. Hind wing pale ochreous-leadened, glossy. Cilia pale tawny-fuscous, becoming pale fuscous-ochreous towards the dorsum.

Ovipositor very elongate. Ostium erect-ovoid, upper edge with an ovate dorsal dilatation, and a noose-shaped rim at each side. (Slide no. 1062 D, type.)

Moss Forest Camp, 2800 m, October 10, 1938. One specimen.

Section 2. *Fore wing with normal neuration. Male without lateral pencils on thorax.*

***Limnaecia ensigera* spec. nov. (fig. 627)**

♂ 11 mm. Head and thorax dark fuscous, apex of the latter mixed with ochreous, face pale yellow (damaged). Antenna pale ochreous. Palpus light yellowish-ochreous, median segment infuscated towards the apex, terminal segment fuscous. Abdomen orange-ochreous, broadly banded with purplish-black above, bands becoming broader posteriorly, posterior half of the dorsum entirely purplish-black, anal tuft bronze above, pale yellow below, venter pale yellow, anterior third infuscated. Anterior leg pale yellow, tibia except the apex and the tarsus, infuscated (other legs missing). Fore wing lanceolate, apex produced, termen faintly concave, very oblique. Bright orange. A moderate basal black patch with a purple gloss, its edge slightly outwards-oblique, concave; this patch connected by a narrow marginal streak with a purplish-black elongate-triangular patch occupying dorsum from about the middle to before the apex, centred with shining purple, top reaching to the fold: apical fourth of the wing purplish-black, with edge somewhat inwardly oblique, strongly convex above, moderately convex beneath; a rather thick longitudinal shining bluish-purple streak above the middle of the disc from $\frac{1}{5}$ to $\frac{2}{3}$, hardly, sinuate, well-defined. Cilia black with a brassy-purple shine. Hind wing dark purplish-fuscous, cilia blackish.

Uncus bipartite, two slender rising rods. Socius, a series of bristles. We are not able to read other parts satisfactorily, as they are delicate, tightly interconnected, and could not be mounted in one plane without risk of spoiling of the unique mount. The right valva appears to be separated in a long slender cucullus and a shorter, somewhat bristly sacculus, with two small dentations on its ventral edge. The left valva is normal, single, slender, clavate and bristly. Aedoeagus (dotted in the

figure), rather long. A curved knob beyond its base may be the anellus process, a large semispheroid plate, the vinculum. (Slide no. 1071 D, type.)

Rattan Camp, 1200 m, March 6, 1939. One specimen.

SCAEOSOPHIDAE

The male genitalia of the genus *Bathybalia* which are described at some length below show a surprising resemblance with a type found in the family Cosmopterigidae. This similarity is so close, that we are compelled to regard the Scaeosophidae as nearly related to the Cosmopterigidae, in spite of the peculiar neuration of the hind wing in the former family. There are no clear indications, in fact, of a relation of the Scaeosophidae with the Oecophoridae, as surmised by several authors. We agree, therefore, with MEYRICK, who separated them from the Oecophoridae.

Key to the Papuan genera of the Scaeosophidae

1. Hind wing with veins 4 and 5 remote. *Cyphothyris* MEYRICK
Hind wing with veins 4 and 5 approximated, connate or stalked 2
2. Hind wing with vein 2 absent, 3, 4, 5 stalked . . . *Cosmiosophista* gen. nov.
Hind wing with vein 2 present 3
3. Hind wing with veins 2 and 3 stalked. *Bathybalia* gen. nov.
Hind wing with veins 2 and 3 separate *Allotalanta* MEYRICK

Cosmiosophista gen. nov. (fig. 636)

κόσμος = humble, *σοφιστής* = able

Head with closely appressed scales, side tufts spreading. Ocellus posterior. Proboscis developed, smoothly scaled. Antenna $\frac{1}{2}$, minutely ciliated in the male, scape elongate, clavate, with a pecten. Labial palpus long, recurved, rather thickened with smoothly appressed scales throughout, terminal segment 1, as thick as the median, acute. Maxillary palpus very small, appressed to the proboscis, scaled. Thorax smooth. Anterior tibia short, thickened with scales roughish below, tarsus short but longer than the tibia. Posterior tibia with appressed scales, slightly roughish at the apex above. Fore wing elongate, broadest at $\frac{1}{3}$, costa impressed in the middle, apex bluntly pointed; with large tufts of raised scales. 1b very long-furcate ($\frac{1}{2}$), lower branch of the furca weak, 2 from beyond $\frac{3}{4}$, 3 and 4 almost connate from the angle, 5, 6 rather distant and parallel, 7 and 8 stalked, to costa, 6 closely approximated to their stalk, 9 closely approximated, 10 from beyond $\frac{1}{5}$, 11 from beyond $\frac{2}{5}$ of cell, no accessory cell. Hind wing under 1, elongate-trapezoid, with a hyaline rounded spot below the cell towards the base, cilia $1\frac{1}{4}$, 1c vestigial, 2 absent, 4 and 5 stalked from the angle, 3 out of their stalk, 6 and 7 parallel, 8 straight. to the middle of the costa, discoidal vein concave, outwardly oblique,

Genotype *Cosmiosophista trachyopa* spec. nov., male.

Represents a peculiar development of the *Scaeosophia* type.

Cosmiosophista trachyopa spec. nov. (figs. 636, 640)*τραχύς* = rough, *ὄψ* = eye

♂ 14 mm. Head and thorax light tawny, the latter slightly mixed with brown. Antenna light tawny, ringed with dark fuscous, towards the apex becoming whitish, mixed above with blackish scales. Palpus pale tawny mixed with brownish, terminal segment with a subbasal, and a subapical, brown ring. Abdomen light tawny-fuscous, anal tuft light ochreous. Legs pale ochreous-tawny, all tarsi mixed with brownish, except the articulations of the segments, median tibia with the basal half brown, an oblique brown streak along the apical half, posterior tibia with a cloudy subapical brownish suffusion. Fore wing elongate-ovate, costa moderately prominent at $\frac{1}{3}$ and $\frac{3}{4}$, gently concave in between, apex bluntly pointed,

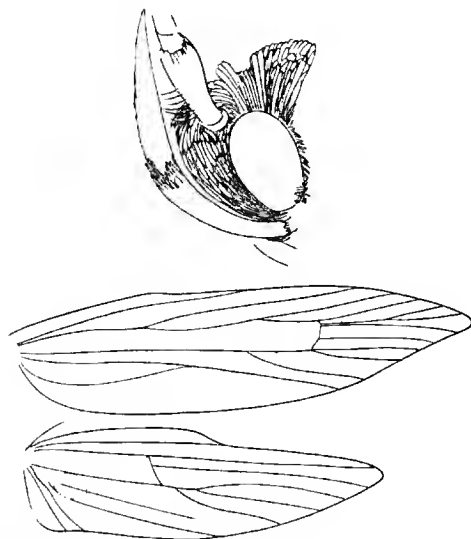


Fig. 636: *Cosmiosophista trachyopa* gen. nov., spec. nov., male, head and wing venuration.

termen rounded, considerably oblique. Rather light tawny, base of the costa pale ochreous with a dark fuscous dot; three short ill-defined outwardly oblique pale ochreous streaks from beyond the base to the middle of the costa; an elongate-semiovate fuscous-tawny costal patch from the middle to $\frac{3}{4}$, terminated posteriorly by a narrow undulate whitish transverse streak, reaching to the upper edge of the cell well before the angle; basal fourth of the dorsum pale ochreous; an oblique transverse series of rounded scale-tufts beyond base of wing from below the costa to the dorsum; an outwardly angulate, rather narrow fascia of brown suffusion from beyond $\frac{1}{6}$ of the costa to before $\frac{1}{4}$ of the dorsum, interrupted in the fold, above dorsum adjacent to a well-defined round pale ochreous dot; strongly raised dark fuscous scale-tufts: two in a vertical series well before the middle of the wing, upper small, rounded, lower large, elongate,

outwardly oblique, just below and parallel to about the fourth fifth of the fold; two large rounded tufts on the angles of the cell, interconnected by a dark fuscous irroration which is extended as a narrow longitudinal streak, not reaching the termen below the apex; an ill-defined, narrow oblique whitish longitudinal streak from the upper angle of the cell, ending with a white bar just below the apex, extending over the cilia; above this streak costa tinged fuscous. Cilia pale ochreous densely mixed with tawny, along the lower half of the termen and in the tornus pale ochreous, mixed towards the base with dark brown, apical fourth of the cilia around the apex whitish with a brown apical line. Hind wing whitish-lead-grey, posterior half irrorated with dark bronze-fuscous. Cilia pale ochreous-bronze, along upper half of the termen somewhat infuscated, base along the dorsum narrowly mixed with pale metallic-blue scales.

Tegumen with a strong base, concave. Uncus bipartite: two long pending horns (in the mount drawn together, actually separate). Socii, a few weak bristles. Valva strong, broad, costa short, rounded, with a long, clavate, bristled process rising from its base; sacculus large, strongly and triangularly dilated, bristled posteriorly, top rounded, separate, cucullus absent. Anellus indefinite. Vinculum very small. Aedoeagus long, submembranous, rather slender. Cornuti remarkable: a broad and long tortuous denticulate band, with a spike below its top, the top narrowed and produced, with larger denticulations, proximal extremity of this band forming a long narrow sclerotized filament. (Slide no. 1075 D, type.)

Sigi Camp, 1500 m, February 26, 1939. One specimen.

Bathybalia gen. nov. (fig. 637)

βαθύς = strong, *βαλιός* = dotted

Head with smoothly appressed scales, face somewhat retreating. Ocellus posterior. Proboscis moderate, scaled above. Antenna $\frac{3}{4}$, in the male minutely ciliate, scape moderate, slightly flattened, subconcave, without a pecten. Labial palpus moderately long, recurved, ascending, with smoothly appressed scales, slender, median segment moderately dilated, terminal segment under 1, scaled, acute. Maxillary palpus very small, subappressed. Thorax without a crest. Abdomen rather smoothly clothed with dense minute scales. Posterior tibia clothed with rough hairs above. Fore wing elongate-ovate, without raised scale-tufts; 1b furcate at the base, furca over $\frac{1}{4}$, 2 from $\frac{4}{5}$, 3 from well before the angle, 4 from the angle, 5 almost connate with 4, 7 and 8 stalked, 7 to the costa, 11 from the middle. Hind wing 1, elongate-subtrapezoid, cilia under 1; cell extremely short, about $\frac{1}{5}$ of the wing length, lower edge with an elongate hyaline thickening; 2 abruptly curved towards the base, short-stalked with 3, stalk from before the angle, 4 and 5 closely approximated at base to each other and to the stalk of 2 and 3, 4 from the angle, 6 and 7 parallel.

Genotype *Bathybalia microsperma* spec. nov., male.

Differs from *Bathraula* MEYRICK, 1919, in the terminal segment of the labial palpus being shorter than the median, in the origin of the veins

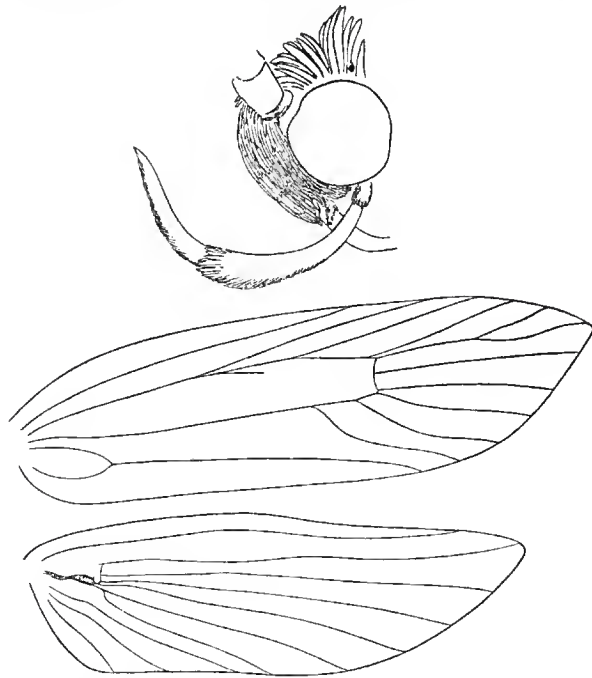


Fig. 637: *Bathybalia microsperma* gen. nov., spec. nov., male, head and wing neuration.

2 and 3 in the fore wing, and of the stalk of the veins 2 and 3 in the hind wing: in *Bathraula* the stalk of 2 and 3 in the hind wing originates from towards the base, vein 4 from the angle.

***Bathybalia microsperma* spec. nov. (figs. 631–635, 637)**

μικρός = small, *σπέρμα* = seed

♂ 17.5–23 mm. Head white, vertex greyish. Antenna white, faintly ringed with greyish, scape greyish. Palpus white, basal segment blackish, median segment with the basal half and an interrupted subapical or entire apical ring, terminal segment with a subbasal ring and with the tip, blackish. Thorax whitish-grey, tegula white. Abdomen bronze-grey; venter pale ochreous-greyish. Legs grey, posterior tibia and tarsus, white. Fore wing elongate-ovate, costa curved towards extremities, more so basally, apex subobtuse, termen rounded, considerably oblique. White, markings blackish. Base of the costal edge narrowly blackish; a dot on the base of the costa, a smaller one below and beyond this; an outwardly oblique transverse series of four rounded dots beyond the preceding pair, first dot minute, subcostal, second largest, on vein 12, fourth dot just below the fold, at about $\frac{1}{5}$ of the wing length; a somewhat less oblique series of three dots, first of these irregular, just below $\frac{1}{3}$ of the costa,

second dot below the upper edge of the cell, third, elongate, more shifted posteriorly, on $\frac{2}{3}$ of the fold; an elongate small dot just below $\frac{2}{3}$ of the costa and a round dot on the middle of the closing vein; scattered blackish scales tending to form small dots: on the upper half of the disc before the middle and in a more or less distinct transverse band from $\frac{2}{3}$ of the costa to the termen before the tornus; an irregular, outwardly curved sub-apical transverse band of blackish-grey irroration from vein 10 to before the termination of vein 4; a marginal row of small blackish dots between veins along the posterior fourth of the costa, in the apex and along the termen. Cilia white. Hind wing and cilia, glossy greyish-white.

The genitalia are peculiarly built. We figure those of the type specimen *in toto* (in ventral aspect) and those of the paratype specimen dissected, to make clear the different parts.

Eighth abdominal segment considerably modified, membranous, partially strongly sclerotized, enveloping the genitalia and tightly connected with them by ligaments situated dorsally and caudally. Apparently the genitalia can be extruded out of this segment only partially or not at all. Dorsally this segment forms paired strong sclerites, subovate and crowned by a long dorsal projection, and a ventral knob. Apparently these structures have taken over the function of the valvae. They must be homologous with the (unpaired) *mensis dorsalis* of the Tortricidae. Ventrally the eighth segment bears two more sclerites, shaped as long curved slender rods and apparently homologous with the unpaired *mensis ventralis* in the Tortricidae.

Inside the cylinder of the eighth segment the genitalia show considerable modifications as compared with the common type. The tegumen is strong and short. The uncus is very short, crowned with two naked flattened projections, and has a rounded top. The socii, the gnathos, and the transtilla are absent. The valvae are moderate, with the sacculi soldered together and forming one horizontal plate, rather rigidly connected with the tegumen and forming together with this a complete ring; cuculli are free, and form submembranous, densely bristled pads. The juxta and the anellus are large, soldered together and rigidly connected with the bases of the valvae, the anellus forming a long cylindrical sheath to the aedoeagus; the anellus projections are slender, with bristled tops. The aedoeagus is curved, somewhat compressed laterally, with its basal part forming a moderately sclerotized, tortuous band. (Slides no. 1026 D, holotype, no. 1027 D, paratype.)

Sigi Camp, 1500 m, February 26, 1939 (holotype), February 19, 1939. Two specimens, remarkably differing in size. It seemed worth while to describe this peculiar type of the genitalia somewhat more elaborately. As said before we met a similar type in the Cosmopterigidae. Their highly specialised character suggests a progressed development along singular lines, which supports very well the separation of the Seacosophidae from the Oecophoridae.

XYLORYCTIDAE

This extensive family is widely distributed also outside Australia, but *Cryptophasa* Mc LEAY, and allies, comprising moths of conspicuously large and even gigantic size, are as characteristic for the fauna of that region as is Kanguru. Not less than 37 species of *Cryptophasa* occur in New Guinea and the Bismark Islands, but they are all endemic, except one (*C. mesotoma* MEYRICK which is also recorded from the Moluccas) and are not known from the Australian continent.

Certain species, as *C. pseudogramma* MEYRICK and *C. curialis* MEYRICK are locally common and come in large numbers to lamp traps. Dr TOXOPEUS informed us that when caught these large insects behave in the way of a clothes moth and try to escape by quickly crawling around. When taken in the hand they scratch the collector with their strong thorny legs.

Nothing is known about the biology of the Papuan species, but most likely it will appear to be the same as in the allied Australian ones. The larvae of certain species in that country are known to bore tunnels in living trees, in which they bring leaves of their food plant and where they take refuge in daytime; after having closed the entrance of the tunnel with a barricade of silk they consume the leaves in peace.

The genus owes its name to this remarkable biology (*κρυπτός* = concealed, *φαγός* = eating), "*Cryptophasa*" being a misprint for "*Cryptophaga*". The name has been emendated by MEYRICK in 1890, but the emendation has been abandoned again, the generic name *Cryptophaga* being preoccupied for a genus in the Coleoptera.

Several genera of the Xyloryctidae, viz. *Cryptophasa*, *Paralecta*, and others, seem to be rather arbitrary; they show considerable variation as to the neuration, the structure of the male antennae and the length of the terminal segment of the labial palpi, all characteristics, which, otherwise, are of great taxonomic importance. This makes the discrimination of the genera very difficult at times, as can be seen from the following key, which is compiled to our best knowledge, but appears to us rather unsatisfactory. It is probable, that future study will reveal these variations in more genera, and consequently will enable us to re-diagnose them on a better and more natural basis. Our present knowledge obliges us to maintain not less than some 112 genera, many of which are based on a single species only.

The abdominal tergites in the two sexes are clothed with moderate or fine bristles which are arranged in transverse rows over posterior half of the tergites or along their posterior margins, and are directed caudad. These bristles are orange-coppery coloured, show through scale clothing and appear like more or less distinct transverse coppery or orange bands. Outside the Xyloryctidae such bristles are richly developed in the Schreekensteiniidae, and are also known in the Oecophoridae (CLARKE), the

Gelechiidae and the Cosmopterigidae. They are entirely absent in the Stenomidae.

The male genitalia are of a simple and uniform type, with only slight differences between the genera. Tegumen rather short, triangular. Uncus and gnathos both triangular, strong, porrect, together forming a pair of tongs, gnathos often embossed towards the apex above. Small lateral haired knobs below the base of the uncus represent the socii. Valva simple, elongate-ovate or pointed, thinly bristled, harpe mostly developed as a sclerotized continuation of the median part of the edge of the sacculus, running longitudinally over the disc of the valva and often forming a strong blunt hook; sacculus broad, folded over the valva. Vinculum strong, pointed or ovate. Juxta sclerotized, under a blunt angle to this fits a very strong anellus, which is often shaped as a large and bulbate sheet, rolled around the aedoeagus and enclosing this distally altogether. Aedoeagus is a strong, slender, narrow tube slightly and gradually tapering apically, telescoping within the juxta. A cornutus is seldom present.

The female genitalia are of the Oecophorid type. Ovipositor rather broad, erect, lobes simple; it is extensile over the length of the eighth segment, which is mostly shorter than the ovipositor itself; postapophyses long. Ostium wide, seldom modified, limen mostly a broad weak transverse plate, emarginate in the middle, dorsal wall of ostium formed by one, two or three broad, densely haired lobes. Duetus bursae simple or with a moderate tubular collieulum in its proximal half, distal half sometimes spiraled. Bursa copulatrix ovoid, mostly simple.

Key to the Papuan genera of the Xyloryetidae

1. Fore wing with a costal scale-projection before and beyond middle, and appearing to be excavate between these projections. Fore wing with veins 2 and 3 separate, 8 absent *Aeria* STEPHENS
Fore wing with costa normally scaled, not seemingly excavate 2
2. Fore wing with vein 7 absent *Callicopris* MEYRICK
Fore wing with all veins present 3
3. Fore wing with closing vein between 3 and 4 inwardly oblique, between 5 and 6 very weak, cell appearing to be open, veins 7 and 8 stalked *Panseptia* MEYRICK
Fore wing with closing vein not thus 4
4. Fore wing with vein 2 from angle, veins 3-5 approximated, 6 and 9 approximated (7 and 8 separate) *Eriogenes* MEYRICK
Neuration of fore wing not thus 5
5. Hind wing with veins 6 and 7 remote 6
Hind wing with veins 6 and 7 closely approximated, connate or stalked; vein 8 often connected with cell by a bar 7
6. Hind wing with vein 7 to costa; cell closed. *Phthonerodes* MEYRICK
Hind wing with 7 to termen; cell partially open *Stachyneura* DIAKONOFF
7. Fore wing with veins 8 and 9 out of 7. 8
Fore wing with vein 9 separate¹⁾ 13

¹⁾ In *Cryptophasa thiobapta* (MEYRICK), vein 9 sometimes out of 7.

8. Fore wing with veins 3 and 4 connate or stalked 9
 Fore wing with veins 3 and 4 separate 10
9. Labial palpus very long *Athrypsiastis* MEYRICK
 Labial palpus moderate *Paralecta* TURNER (part)
10. Fore wing with vein 4 from angle, 3 from $\frac{4}{5}$, 2 from beyond middle
 *Capnolocha* MEYRICK
 Fore wing with vein 3 from angle 11
11. Posterior tibia smooth *Cilicitis* MEYRICK
 Posterior tibia rough-haired above 12
12. Labial palpus long, median segment rather thickened with appressed scales,
 reaching to base of antenna *Niphorycta* MEYRICK
 Labial palpus moderate, median segment slender, not reaching base of antenna
 *Paralecta* TURNER (part)
13. Fore wing with veins 4 and 5 connate or stalked 14
 Fore wing with veins 4 and 5 separate 16
14. Fore wing with veins 4 and 5 connate from angle *Cryptophasa* Mc LEAY (part)
 Fore wing with vein 3 from angle, 4 and 5 connate or stalked, from closing vein
 above angle 15
15. Hind wing with vein 5 weak, 2 from $\frac{2}{3}$ of lower edge of cell
 *Acompsogma* MEYRICK
 Hind wing with vein 5 normal, 2 from beyond $\frac{2}{3}$ of cell *Paralecta* TURNER (part)
16. Fore wing with veins 3 and 4 out of 2 from angle 17
 Fore wing with veins 3 and 4 separate from 2 18
17. Palpus with median segment smooth *Chironeura* gen. nov.
 Palpus with median segment rough-scaled above and beneath
 *Clepsiogenes* MEYRICK
18. Posterior tibia and tarsus with rows of thorny bristles below
 *Cryptophasa* Mc LEAY (part)
 Posterior tibia and tarsus without thorny bristles 19
19. Fore wing with vein 7 to apex or costa 20
 Fore wing with vein 7 to termen 22
20. Palpus with terminal segment half of median or less . . . *Arignota* TURNER
 Palpus with terminal segment longer than half of median 21
21. Fore wing with costa rough-scaled anteriorly; median segment of palpus with
 rather long rough scales beneath *Protrachyntis* MEYRICK
 Fore wing with costa not rough; median segment of palpus somewhat thickened
 terminally, not rough beneath *Scicropepla* MEYRICK
22. Labial palpus moderate *Paralecta* TURNER (part)
 Labial palpus long 23
23. Anterior tarsus in male as long as tibia, dilated with dense rough scales; labial
 palpus with terminal segment rather stout *Xylodriadeha* FLETCHER
 Anterior tarsus in male much longer than tibia, slender; labial palpus with
 terminal segment slender *Xylorycta* MEYRICK

Chironeura gen. nov. (fig. 638)

$\chi\epsilon\acute{\iota}\rho$ = hand, $\nu\epsilon\delta\acute{\iota}\rho\omicron\nu$ = vein

Head with long, appressed scales, side tufts spreading. Ocellus posterior. Proboscis developed, short-scaled. Antenna $\frac{4}{5}$, in the female serrulate, minutely ciliate, scape elongate, smooth-scaled. Labial palpus very long, median segment by far exceeding the base of the antenna, thickened with

smoothly appressed scales, broadest in the middle, terminal segment as long as the median, laterally compressed, smooth, acute. Thorax smooth. Anterior tarsus twice as long as the tibia, slender. Posterior tibia with long rough hairs above and beneath. Fore wing with 1b long-furcate, 2 from the angle, 3 and 4 out of 2, 5 closely approximated at the base, 7 and 8 long-stalked, 7 to the termen, 9 closely approximated to stalk at the base, 11 from the middle. Hind wing trapezoid-ovate, over 1, cilia $\frac{1}{4}$; 2 from the middle of the cell, 3 and 4 stalked from the angle, 5 approximated, 6 and 7 connate.

Genotype *Chironeura chrysocyma* spec. nov., female.

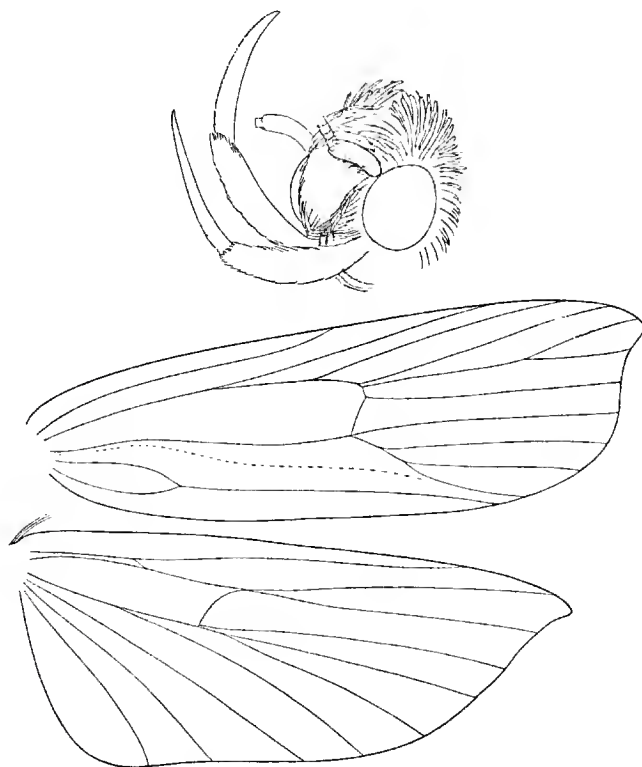


Fig. 638: *Chironeura chrysocyma* gen. nov., spec. nov., female, head and wing neuration.

Structurally nearest to *Rhizosthenes* MEYRICK, 1935, from China, but differing in the neuration: in the fore wing the vein 4 originating out of 2. According to the neuration the new genus approaches *Clepsigenes* MEYRICK, 1930, from New Guinea, but greatly differs in the shape of the palpi and the facies. Probably *Ceratophora phoxopterella* SNELLEN, from Java, also belongs to this genus.

Chironeura chrysocyma spec. nov. (figs. 638, 649, 654)*χρυσός* = gold, *κύμα* = wave

♀ 30 cm. Head white. Antenna light brownish. Palpus light brownish moderately mixed with white, with a pale lilac gloss. Thorax ochreous-whitish with a pale bluish-lilac gloss. Abdomen ochreous-whitish, with broad bronze-orange bands of very fine appressed bristles across segments 2—6. Legs, pecten and venter white. Fore wing elongate-subtruncate, narrow, moderately and gradually dilated. Fulvous-lilac, with a bright light bluish-lilac shine, darker towards the costa, along basal $\frac{1}{4}$ of the dorsum, in middle of the disc and towards the terminal patch; a large terminal patch occupying less than $\frac{1}{5}$ of the wing, bright yellow, towards costa slightly suffused with pink, edge well-defined, from the costa before the apex to the dorsum before the tornus: twice deeply sinuate, concave in the middle, rounded-prominent above and beneath, above dorsum vertical; a subterminal row of small rather irregular transverse marks between the veins, opposite upper half of the termen partially interrupted and tending to be interconnected, towards tornus becoming larger and separate. Cilia bright yellow, along the costa and above the apex suffused with fuscous. Hind wing pale yellowish-white, glossy, cilia white.

Seventh sternite with its caudal edge emarginate. Ostium not modified. Ductus bursae simple. Bursa copulatrix elongate. Signum, a moderate band, with a narrow median keel. (Slide no. 935 D, type.)

Rattan Camp, 1200 m, February-March, 1939. One specimen. An elegant species of a Gelechiid appearance, in the colouring and the markings much resembling a *Lecithocera*.

Pansepta MEYRICK, 1915 (fig. 639)

Pansepta MEYRICK, 1915, Exot. Microl., vol. 1, 377. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 161, 1929.

We slightly extend the definition of this genus and amend it as follows. Palpus with terminal segment about $\frac{1}{2}$ of median. Fore wing with vein 1b furcate, 2 from $\frac{1}{5}$, 3 from angle, 4 remote from 3, short-stalked or connate with 5 or closely approximated at base to 5, closing vein between 3 and 4 inwardly oblique, between 5 and 6 weak, the cell giving the impression of being open, 7 and 8 stalked, 7 to termen, 8 to costa, 9 out of 7, connate with stalk of 7 and 8 or closely approximated. Hind wing with 3 and 4 short-stalked, 5 parallel, 6 and 7 closely approximated, connate or short-stalked.

This genus, which is confined to New Guinea and the Bismarek Islands, can be easily recognized by the characteristic neuration of fore wing and by moderate slender palpi.

Key to the Papuan species of *Pansepta*

1. Glossy fuscous-coppery-bronze *tunsa* spec. nov.
Glossy white 2
2. Fore wing with vein 9 connate with stalk of 7 and 8 or approximated . . . 3
Fore wing with vein 9 out of stalk of 7 and 8. 4
3. Hind wing with veins 6 and 7 short-stalked *languescens* spec. nov.
Hind wing with veins 6 and 7 closely approximated *tactica* spec. nov.
4. Edge of costa in fore wing not suffused with grey; hind wing towards posterior half of costa suffused with grey. *teleturga* MEYRICK
Edge of costa suffused with grey towards base 5
5. Fore wing with termen hardly oblique; dorsum faintly suffused with pale ochreous, this suffusion continued as a fine marginal line to apex; costal edge lilac-grey at base, narrowly ochreous to before apex . . . *splendens* spec. nov.
Fore wing with termen rather oblique; if dorsum suffused then there is no marginal line; costal edge grey towards base 6
6. Antennal ciliations $2\frac{1}{2}$. Fore wing white, with dorsum not suffused greyish. Hind wing white. *hierophanes* MEYRICK
Antennal ciliations under 1. Fore wing white, distinctly suffused with pale lilac-greyish, especially towards costa, dorsum suffused with greyish. Hind wing white, distinctly tinged yellowish *amoerocera* spec. nov.

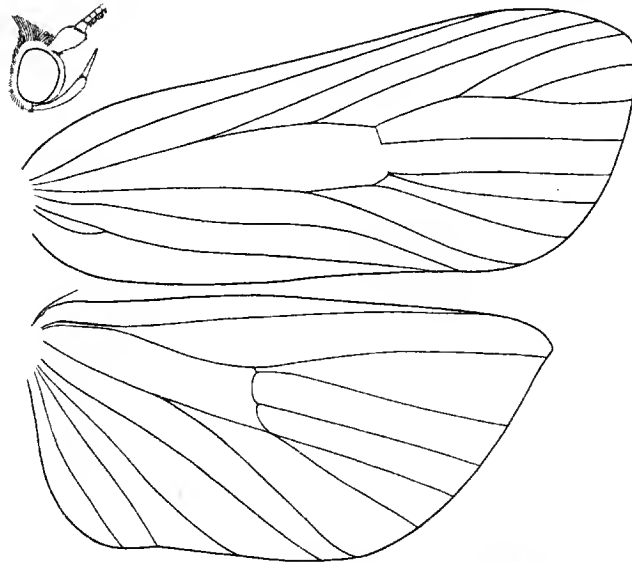


Fig. 639: *Pansepta splendens* spec. nov., male, head and wing neuration.

***Pansepta tunsa* spec. nov. (fig. 646)**

♂ 32 mm. Head fuscous. Antenna blackish. Palpus moderate, slender; pale ochreous, upper edge suffused with dark brown. Thorax deep fuscous-grey with purple gloss. Abdomen pale grey, finely banded with dark fuscous, tergites 1—3 with broad bands of orange-coppery fine bristles. Legs fuscous-grey. Fore wing with veins 4 and 5 connate; elongate-ovate, moderately dilated, costa slightly curved anteriorly, faintly concave in the middle, curved posteriorly, apex obtusely pointed, termen long, con-

siderably rounded, very oblique, dorsum moderately and gradually rounded. Fuscous-coppery-bronze, glossy, appearing olive in certain lights; a narrow streak along the costal edge paler greyish-olive; a streak along the costa below the preceding, and another, broader streak just above the dorsum, running from the base to about $\frac{4}{5}$, connected posteriorly by a very broad somewhat curved transverse band just beyond the cell, extending along veins to the termen; these streaks glossy violet-purple, ill-defined in certain lights except towards the base; dorsum distinctly ciliate throughout, a narrow suffused marginal streak shining bright reddish-orange in certain lights, running from $\frac{1}{4}$ to the tornus and along the lower half of the termen, gradually dilated towards the tornus. Cilia greyish-white, mixed with fuscous-grey, a fuscous-grey subbasal shade. Hind wing glossy grey, appearing fuscous in certain lights, dorsal third tinged fuscous-bronze. Cilia light leaden-grey, with the basal half darker dull grey.

Tegumen robust. Uncus rather short. Valva broad anteriorly, narrow, curved posteriorly, apex pointed; sacculus very broad, $\frac{1}{2}$, its upper edge simple, harpe absent. Vinculum robust. Anellus broad, over $\frac{1}{2}$. Juxta long, slender. (Slide no. 881 D, type.)

Bernhard Camp, 50 m, July—November 1938 (J. OLTHOF). One specimen. A very distinct species, with a peculiar shape of the fore wing.

Pansepta tactica spec. nov. (fig. 641)

τακτικός = able to arrange

♂ 29 mm. Head, thorax white. Antenna creamy. Palpus light ochreous. Abdomen creamy-white, basal segment white above. Legs ochreous, suffused with pale fulvous above. Fore wing with 7 and 8 stalked, 8 to termen, 9 out of stalk near the base; elongate-subtriangular, broadest at $\frac{3}{4}$, costa hardly curved anteriorly, rather curved towards the apex, apex subobtusate, termen gently rounded, oblique. Snow-white. Costal edge narrowly ochreous-fulvous; a narrow suffused pale orange-ochreous streak along the posterior third of the costa; small longitudinal fulvous marks on the terminations of the veins 11 and 10, respectively, that on vein 10 larger, centred with a black irroration; a jet-black submarginal dash from about the termination of vein 9, towards the apex, not reaching the latter; minute jet-black triangular marginal dots on veins from the apex to the tornus; a faint pale golden suffusion along the dorsum from well beyond the base, terminated above by the course of vein 1b. Cilia (imperfect) white. Hind wing with veins 3 and 4 short-stalked, 6 and 7 closely approximated towards the base; snow-white, cilia snow-white.

Uncus and gnathos moderate. Valva with cucullus rounded. Vinculum rather long. Juxta strong. Anellus swollen, strong, rather short, over $\frac{1}{4}$ of aedeagus which is long and slender. (Slide no. 998 D, type).

Araucaria Camp, 800 m, March 24, 1939. One specimen.

Pansepta splendens spec. nov. (figs. 639, 652)

♂ 35 mm. Head, thorax and abdomen glossy-white, faintly touched with yellowish, 2—6 abdominal tergites with broad bands of orange-coppery fine bristles, mixed with white scales, posterior edges of the tergites white, becoming broader on the preanal segments. Palpus sordid pale fuscous. Legs white, anterior femur and tibia pale fuscous. Fore wing with veins 4 and 5 connate, elongate, little dilated, costa curved towards the extremities, straight in the middle, apex rather obtuse, termen gently rounded, hardly oblique. Shining snow-white; edge of the costa narrowly suffused with pale lilac-grey, becoming pale sordid-ochreous posteriorly, disappearing towards the apex; dorsum very faintly suffused with pale yellowish-ochreous, which colour forms a hardly perceptible marginal line posteriorly along the dorsum, the tornus, and the termen to the apex. Cilia glossy snow-white. Hind wing and cilia glossy white, less shining and slightly tinged greyish.

Unicus with slightly dilated blunt top. Valva broad, with its apical third curved; sacculus under $\frac{1}{2}$, broad, upper edge bluntly projecting in the middle, harpe absent. Vinculum broad. Anellus broad, over $\frac{1}{2}$. Aedoeagus gradually dilated towards the extremities, moderately long. (Slide no. 879 D, type.)

Iebèlè Camp, 2250 m, November 27, 1938. One specimen. Nearest to *P. hierophanes* MEYRICK.

Pansepta languescens spec. nov. (figs. 647, 648)

♂, ♀ 32 mm. Head white, laterally and on vertex isabel-colour. Antenna white, basal fifth isabel. Palpus pale fuscous, median segment slightly suffused with pale brownish. Thorax and abdomen isabel, former becoming white towards the apex. Legs white, anterior femur, tibia and tarsus infuscated, pale-ringed. Fore wing with veins 4 and 5 approximated, vein 9 separate, approximated to stalk of 7 and 8; elongate, moderately dilated, costa curved, more so along its posterior fifth, apex angular, pointed, termen sinuate, moderately oblique. Glossy white, but not shining, anterior $\frac{3}{4}$ less glossy, faintly tinged isabel, dorsum below the fold suffused with rosy-isabel, base of costal edge with a narrow blackish streak. Cilia snow-white. Hind wing with 3 and 4 short-stalked, 6 and 7 short-stalked; glossy white, tinged isabel, veins more distinctly isabel-coloured, a faint longitudinal isabel suffusion below the costa from the base to $\frac{3}{4}$; cilia snow-white.

Tegumen moderate. Unicus short. Valva semiovate, moderately broad, top rounded; sacculus about $\frac{1}{2}$, posteriorly with a sclerotized ridge above; harpe long, bent twice, bristled above. Vinculum moderate. Anellus over $\frac{3}{4}$. Aedoeagus slender, vesica with an apical cornutus. (Slide no. 882 D, holotype.)

Ovipositor very broad, short, abruptly narrowed, lobes small. Ostium narrow, limen not developed. Ductus bursae with a colliculum, forming a wrinkled, narrowed tube, angularly bent at the end, distal part of the ductus irregularly tortuous. Bursa simple. (Slide no. 883 D, allotype.)

Moss Forest Camp, 2800 m, October 15, 1938 (holotype, male), October 9—November 5, 1938 (allotype, female). Two specimens. Allied to *P. hierophanes* MEYRICK.

***Pansepta amoerocera* spec. nov. (fig. 639a)**

ἄμοιρος = poor, κέρας = horn

♂ 21 mm. Head sordid white. Antennal ciliations about 1. Palpus white, median segment, except the apex, suffused with grey. Thorax sordid white, anterior third, except the patagia and the tegulae, suffused with greyish. Abdomen and legs white, tergites with broad bands of fine orange bristles mixed with white scaling, anal tuft tinged pale ochreous. Fore wing with veins 8 and 9 out 7, 4 and 5 short-stalked; rather narrow, elongate, little dilated, costa little curved towards extremities, hardly curved in middle, apex obtusely pointed, termen slightly concave, oblique.

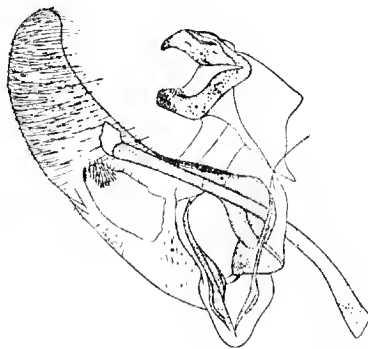


Fig. 639a: *Pansepta amoerocera* spec. nov., male, genitalia.

Glossy silvery-white; basal fourth of the costal edge suffused with black; dorsum below fold tinged pale greyish-lilac. Cilia white, faintly tinged pale lilac in the tornus and along the dorsum. Hind wing with veins 3 and 4 short stalked, 6 and 7 short-stalked; white, tinged pale yellowish, cilia white.

Uncus and gnathos robust. Valva narrowed, little curved; harpe an ovate sclerotized plate, with its distal third bristled. Anellus bulbate. Aedoeagus very long, slender. Cornutus, a short small tooth. (Slide no. 920 D, type.)

Sigi Camp, 1500 m, February 19, 1939. One specimen. Distinct by the small size, by the short ciliations of the antennae and by the yellowish-tinged hind wings.

Athrypsiastis MEYRICK, 1910

Athrypsiastis MEYRICK, 1910, Trans. Ent. Soc. Lond. 1910, pp. 457—458.
FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 27, 1929.

Key to the Papuan species of *Athrypsiastis*

1. Pale greenish-grey, sprinkled violet-brown; a large rosy-brown suffusion on middle of dorsum *rosiflora* MEYRICK
Not thus 2
2. Pale ochreous-brown *phaeoleuca* MEYRICK
Silvery-white, base of the costal edge grey or blackish 3
3. Smaller species: 14 mm. Fore wing white with a golden gloss *chionodes* spec. nov.
Larger species: 21—24 mm. White, base of dorsum suffused with pale grey 4
4. Palpus white, median segment except apex fuscous-grey, terminal segment mixed with greyish below; dorsum pale isabel-greyish, this colour extending over apex of wing and continued as a narrow faint marginal shade to apex.
. *delicata* spec. nov.
Palpus white, dorsum faintly tinged with pale grey suffusion *symmetra* MEYRICK

***Athrypsiastis chionodes* spec. nov.** (fig. 650)

χιωνόδης = snow-like

♂ 14 mm. Head, thorax and abdomen glossy white, faintly tinged yellowish-isabel. Antenna white, pectinations black. Palpus white, median segment in the middle above suffused with blackish. Legs creamy-white. Fore wing elongate-ovate, costa rather curved towards the extremities, straight in the middle, apex obtusely pointed, termen straight, oblique above, broadly rounded beneath. White, with a pale golden gloss; base of the costal edge black. Cilia snow-white. Hind wing somewhat less glossy, white faintly tinged pale yellowish, cilia snow-white.

Tegumen moderate. Uncus broadly triangular, gnathos projecting. Valva curved anteriorly, gradually narrowed; sacculus with a strong sclerotization, concave and haired above. Vinculum blunt. Anellus broad, $\frac{1}{2}$. Aedoeagus moderate, curved. (Slide no. 885 D, type.) Shows a close affinity to the genus *Paralecta*.

Bernhard Camp, 50 m, October 8, 1938 (J. OLTHOF). One specimen. Distinct by the shape of the fore wing and by the small size.

***Athrypsiastis delicata* spec. nov.** (fig. 651)

♂ 24 mm. Head, thorax and abdomen white tinged isabel-colour. Antenna with basal half white above, pectinations blackish, apical half simple, dark grey; scape white, tinged isabel. Palpus white, median segment except apex, fuscous-grey, terminal segment mixed with greyish below. Legs white, anterior grey, tarsus white-ringed. Fore wing elongate-subtriangular, dilated, broadest at $\frac{3}{5}$, costa moderately curved, slightly bent and prominent at $\frac{3}{5}$, apex obtuse, termen moderately rounded,

oblique; vein 11 from middle, vein 8 to apex. Glossy white, in certain lights faintly touched with isabel towards the base and the anterior half of the costa. Anterior fourth of the costal edge with a narrowed blackish streak; dorsum pale isabel-greyish, this colour very faintly extended over the base of the wing, hardly reaching above the fold, extended also as a narrow marginal streak in the tornus to the base of the termen, continued along the termen to the apex as a very faint greyish marginal shade, which is visible only in certain lights; cilia snow-white. Hind wing glossy white, cilia snow-white.

Tegumen erect, rather narrow. Uncus curved downward, truncate. Gnathos triangular, curved upward. Socii, pending pads. Valva large, very broad, lower edge angularly projecting in the middle; sacculus broader anteriorly, abruptly narrowed beyond $\frac{1}{3}$ of the valva, continued as a long curved band covered with appressed bristles to below the top of the valva. Anellus broad, over $\frac{1}{2}$. Aedoeagus moderate, curved, with a subapical tooth. (Slide no. 884 D, type.)

Araucaria Camp, 800 m, March 8, 1939. One specimen. Superficially close to *A. symmetra* MEYRICK. The male genitalia are considerably differing from those in the preceding species, and possibly indicate a separate genus, but the differences are not supported by other characters, therefore for the time being we leave the species in the present genus.

Niphorycta MEYRICK, 1938

Niphorycta MEYRICK, 1938, Trans. Ent. Soc. Lond., vol. 87, p. 518.

Key to the species of *Niphorycta*

1. Hind wing white; under side of fore wing except cilia rather dark grey.
- *hypopercna* MEYRICK
- Hind wing sordid pale greyish, veins dark fuscous; under side of fore wing
- fuscous *hemipercna* spec. nov.

Niphorycta hemipercna spec. nov. (fig. 656)

$\eta\mu$ = half, $\pi\epsilon\sigma\kappa\iota\acute{o}\varsigma$ = dark grey

♂ 23—25 mm. Head, antenna, thorax and abdomen snow-white, abdominal tergites 1—7 with broad bands of orange-coppery bristle-clothing mixed with white scales, these bands broadest on the middle segments, posterior edge of the segments pure white, becoming broader towards the apex of the abdomen. Palpus whitish, median segment fuscous. Legs white, anterior and median infuscated. Fore wing elongate, little dilated, costa gradually considerably curved, apex pointed, termen finely concave, oblique. Dull snow-white, base of the costal edge narrowly infuscated; cilia somewhat glossy, pure white. Hind wing sordid pale greyish, veins dark fuscous; cilia pure white. Underside of the fore wing except the cilia fuscous.

Uncus short. Gnathos robust, top rounded. Valva narrow, curved; sacculus over $\frac{1}{2}$, apex simple; harpe, a broad deeply scobinate and finely dentate sclerotized patch, with several dense groups of bristles posteriorly, apex short-pointed. Vinculum small. Anellus strong, under $\frac{1}{2}$, apical third narrowed and dentate. Aedocagus gently curved. (Slide no. 886 D, holotype.)

Sigi Camp, 1500 m, February 23, 1939 (holotype). Rattan Camp, 1200 m, February—March, 1939. Two males. Differs from the genotype, *N. hypopercna* MEYRICK, by the infuscated base of the costa in the fore wings, and by the grey hind wings.

Paralecta TURNER, 1897

Paralecta TURNER, 1897, Ann. Queensl. Mus., vol. 4, p. 25. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 162, 1929.

Key to the Papuan and Malayan species of *Paralecta*

(Malayan species are placed between brackets)

1. Sexes dimorphous: fore wing in male black, with metallic gloss, in female white, with a black discal spot and dark terminal suffusion. (*antistola* MEYRICK)
Not thus. 2
2. Fore wing devoid of dark markings 3
Fore wing with more or less developed dark markings present 6
3. Silvery-white, four ochreous lines: along costa, in middle of disc, along fold, and along dorsal edge; a dot on lower angle of cell *amphiplicata* MEYRICK
Unicolorous. 4
4. Glossy straw-yellow, cilia concolorous *cerocrossa* MEYRICK
Dull pale brownish 5
5. Antennal ciliations $1\frac{1}{2}$; unicolorous pale brownish; vein 9 connate.
. *isopela* MEYRICK
Antennal ciliations $2\frac{1}{2}$; pale brownish suffused with whitish towards costa except towards apex; vein 9 separate. *vadosa* MEYRICK
6. A black dot in apex and a row of smaller dots along lower half of termen; costa with an orange streak *terminata* MEYRICK¹
Not thus. 7
7. A white streak below anterior half of costa, edged below by a greyish-violet streak from base of dorsum to near apex. *iocapna* MEYRICK
No such longitudinal streak 8
8. A variably shaped angulate or sinuate transverse line or band *subterminal*: at $\frac{1}{4}$ — $\frac{1}{5}$, however faint, still perceptible 9
Sometimes a marginal terminal streak, but no trace of a transverse subterminal fascia 14
9. Transverse fascia strongly outwards-angulate above middle. 10
Transverse fascia outwardly convex just above middle, concave above and beneath, not angulate *chalarodes* MEYRICK

¹) Described as a *Xylorycta*.

10. Pale, with transverse fascia hardly perceptible, a faint rosy-bronze patch on $\frac{1}{3}$ of dorsum, acutely continued along wing edge almost to tornus *conflata* spec. nov.
Transverse fascia distinct 11
11. Transverse fascia above and below angulation gently outwards-convex *rhodometallica flagellata* spec. nov.
This fascia above and below angulation distinctly concave 12
12. Suffused throughout with rosy-bronze, tinged lilac, but paler beyond transverse fascia; upper half of this fascia slightly concave in male, lower half straight in female *rhodometallica* spec. nov.
Not thus suffused, costa pale; both halves of the transverse fascia considerably concave 13
13. Termen sinuate, not darkly suffused. *acutangula* spec. nov.
Termen gently concave in middle, almost straight, deep rosy-bronze suffusion on its middle. *hexagona* spec. nov.
14. Transverse fascia inwardly oblique, almost straight above, moderately curved below *nephelodelta* MEYRICK
Transverse fascia slightly outwards oblique, outwardly convex in middle, concave towards extremities *electrophanes* MEYRICK

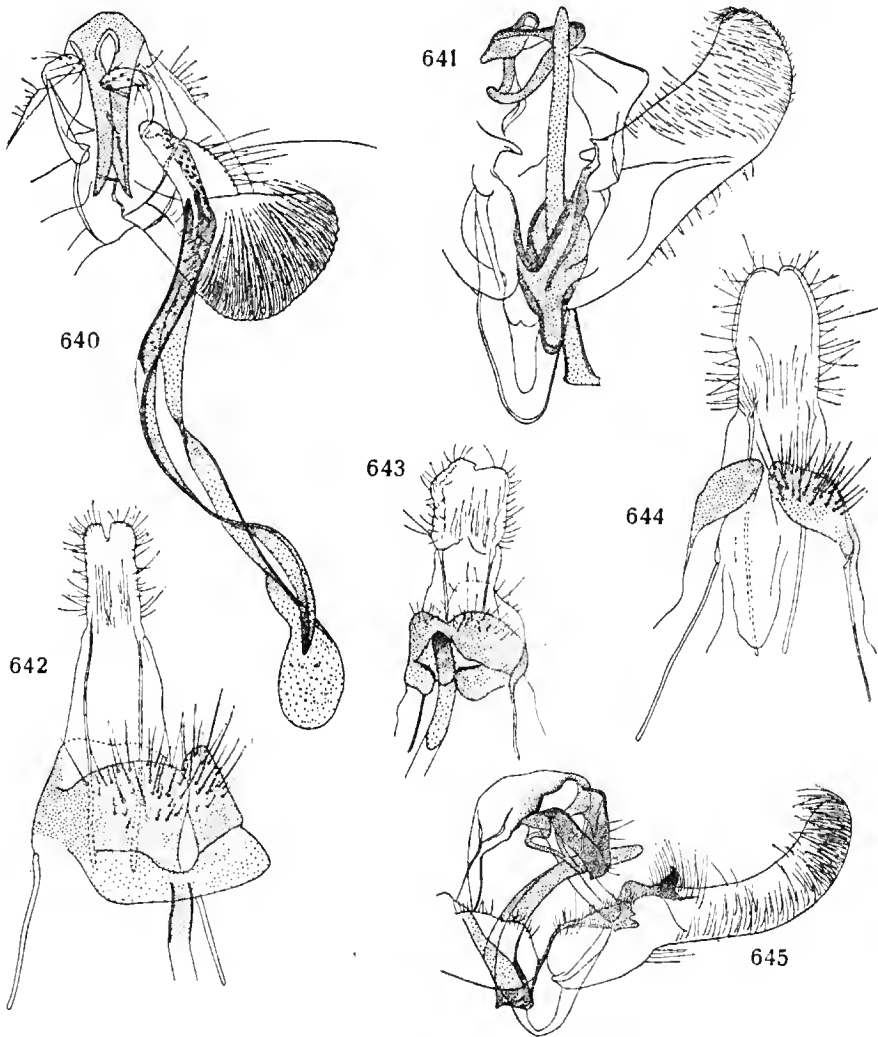
***Paralecta conflata* spec. nov. (fig. 659)**

♂ 27 mm. Head, thorax and abdomen pale yellowish-white, apex of thorax slightly mixed with fuscous, third abdominal tergite with a triangular patch of fine coppery-orange bristles, showing through sealing. Antenna golden-ochreous, apical fifth sealed with whitish above. Palpus whitish, laterally suffused with fuscous-grey, terminal segment less so. Legs pale yellowish-whitish, infuscated at the inner side and above except the median and the posterior tibia. Fore wing elongate-subtriangular, rather broad, but little dilated, costa curved, more so towards the apex, apex obtusely pointed, termen gently sinuate, little oblique. Pale ochreous-whitish tinged yellowish, slightly irrorated with pale tawny, partially suffused with pale fuscous-tawny, sparsely sprinkled with dark fuscous. Basal $\frac{2}{5}$ of the costal edge narrowly dark fuscous. Pale fuscous-tawny suffusion forming a moderate streak along $\frac{3}{4}$ of the dorsum, above not reaching the fold, and a broad transverse band at about $\frac{3}{5}$, becoming indefinite towards the middle of the wing and towards the fold, but indicating a connection with the dorsal suffusion posteriorly; the posterior edge of this band more distinct, strongly angulate in the middle, slightly concave above and below the angulation; dark speckling more distinct along the costal half of the wing from beyond the base, along $\frac{1}{3}$ of the dorsum and towards the tornus, forming a small outwardly oblique dash on the upper angle of the cell. Cilia whitish, tinged pale yellowish, a greyish-fuscous apical fascia becoming broader towards the tornus, where tips of the scales are white. Hind wing pale golden-ochreous, cilia glossy pale ochreous-whitish.

Uncus and gnathos large, triangular, the latter with a long, pointed

top. Valva narrow, gradually curved; sacculus under $\frac{1}{3}$, broad; harpe straight, moderate, edges thickened and haired, top rounded. Vinculum rather long. Anellus broad, narrowed along apical third. Aedoeagus straight, slender. (Slide no. 887 D, type.)

Rattan Camp, 1200 m, February—March, 1939. One specimen.



Genitalia of Scaeosophidae and Xyloryetidae. Fig. 640: *Cosmiosophista trachyopa* spec. nov., male. Fig. 641: *Panseptia tactica* spec. nov., male. Fig. 642: *Paralecta rhodometallica* spec. nov., female. Fig. 643: *Phthonerodes cryptoleuca* spec. nov., female. Fig. 644: *Arignota clavatrix* spec. nov., female. Fig. 645: *Phthonerodes anthracopsara* spec. nov., male.

Paralecta hexagona spec. nov. (fig. 662)

♂♂ = six, *γovía* = hook

♂ 28—30 mm. Head, thorax and abdomen creamy-white, thorax posteriorly and tips of the tegulae, suffused with pale lilac-greyish, transverse bands of bristles on the abdominal tergites little perceptible, deep coppery. Palpus creamy-white, laterally tinged isabel. Legs creamy-whitish. Fore wing elongate-triangular, costa little curved towards extremities, gently concave in the middle, apex blunt, termen gently concave, oblique. White, terminal fourth suffused with pale lilac-grey, sparsely sprinkled with elongate coppery-lilac scales posteriorly. Costa narrowly suffused with pale golden-ochreous; markings lilac-coppery, with a golden gloss: a large triangular patch on $\frac{1}{3}$ of dorsum, darker posteriorly, its top somewhat truncate, reaching to the lower edge of the cell, its lower posterior angle narrowly continued along the dorsum to $\frac{2}{3}$, connected there with a narrow suffused transverse fascia at $\frac{2}{3}$ of the wing, acutely angulate somewhat above the middle, concave above and beneath, hardly reaching the costa at $\frac{2}{3}$; a terminal suffusion from the apex to above the tornus, triangularly narrowed in the middle, with indefinite edge. Cilia coppery-fuscous, with a broad antebasal and a faint subapical purple shade, tips whitish; cilia opposite the apex, suffused with grey. Hind wing pale golden-ochreous, cilia paler, with a faint ante-median shade.

Valva moderately curved, narrowed along the posterior half, its top broad, rounded; sacculus under $\frac{1}{2}$; harpe, a long, sickle-shaped hook ascending above the disc of the valva, upper edge short-haired. Vinculum moderate. Anellus $\frac{3}{4}$, broad. Aedoeagus short, its basal half dilated. (Slide no. 888 D, holotype.)

Araucaria Camp, 800 m, March 7, 1939 (holotype, male). Rattan Camp, 1200 m, February—March, 1939. Baliem Camp, 1700 m, November 16—27, 1938. Three specimens. The paratypes with faint discal markings, with the dorsal patch hardly perceptible. Allied to *P. electrophanes* MEYRICK.

Paralecta acutangula spec. nov. (figs. 657, 658)

♀ 36 mm. Head white, side tufts pale isabel-colour. Antenna isabel. Palpus white, median segment suffused above with rosy-fuscous. Thorax pale isabel-lilac, a subapical inverted-V-shaped dark fuscous mark; patagium and tegula whitish, the latter suffused with pale lilac towards the apex. Abdomen isabel-whitish, segments dorsally with bands of coppery-ferruginous, fine, appressed bristles. Legs isabel, anterior and median tarsus suffused with pale brownish-ochreous. Fore wing with veins 3, 4, 5 approximated, 7 and 8 stalked, 8 to termen, 9 closely approximated; elongate, dilated, somewhat curved; costa considerably curved

throughout, apex moderately pointed, somewhat projecting, termen sinuate, moderately oblique. Pale whitish-lilac, sparsely speckled with dark fuscous-lilac. Anterior fifth of the costal edge suffused with dark brown, posterior half, with pale ochreous; faint narrow lilac-fuscous transverse fascia from before $\frac{2}{3}$ of the costa to beyond $\frac{3}{4}$ of the dorsum, acutely angulate in the middle and reaching posteriorly as far as $\frac{4}{5}$ of the disc, concave above and below the angulation; wing before this fascia evenly suffused with pale brownish-lilac, except a broad whitish suffusion on the costa from the base to before the middle, posterior extremity of this suffusion indefinite; a cloudy dark bronze-lilac suffusion along the dorsum from $\frac{1}{5}$ to $\frac{3}{4}$, much narrowed posteriorly, forming an ill-defined projection at $\frac{1}{3}$ of the wing, reaching well above the fold. Cilia rosy-lilac with a golden gloss, basal half dull pale whitish-lilac. Hind wing pale ochreous-whitish with a golden gloss, towards the apex becoming pale ochreous; cilia concolorous.

Seventh sternite, a simple haired plate, with the upper edge slightly emarginate. Ostium narrow. Ductus bursae with a slender tubular colliculum. Signum, a weak rhomboidal plate, with a small transverse ridge. (Slide no. 889 D, type.)

Iebèlè Camp, 2250 m, November—December, 1938. One specimen. Allied to the preceding species.

***Paralecta rhodometallica* spec. nov. (figs. 642, 661)**

ῥόδεος = red, *μεταλλικός* = metal

♂ 30—33 mm, ♀ 33 mm. Head whitish. Palpus whitish, median segment dark grey except the apex. Thorax light lilac-grey, suffused with whitish anteriorly, tips of the patagia and the apex, darker grey. Abdomen pale whitish-ochreous, with orange-coppery transverse bands of appressed fine bristles. Legs pale golden-ochreous, anterior leg infuscated medianly, all tarsi suffused with golden-tawny. Fore wing subtriangular, broad, strongly dilated, less so in the female, costa gradually curved, apex obtuse, termen straight, moderately oblique. Whitish-grey-lilac, appearing brownish-lilac or rosy-brownish in certain lights, finely irrorated with dark brownish-lilac. A very narrow brownish-lilac transverse fascia from $\frac{2}{3}$ of the costa to $\frac{3}{4}$ of the dorsum, angulate somewhat above the middle, angulation rather irregular, subacute, reaching posteriorly as far as $\frac{4}{5}$ of the wing length, fascia almost straight above, gently outwards-concave below; wing before the fascia appearing darker brownish-lilac in certain lights, beyond fascia more distinctly suffused with whitish-grey-lilac; a brownish-lilac suffusion along the dorsum from beyond the base to $\frac{3}{4}$, much narrowed towards extremities, triangularly dilated and reaching the lower edge of the cell at $\frac{1}{3}$ of the wing, posterior edge of this triangle suffused with dark

lilac-purple. Cilia rosy-coppery, somewhat suffused with whitish-grey, a suffused deep purple subapical fascia dilated towards the tornus. Hind wing pale golden-yellowish-ochreous, bright golden towards the apex, cilia concolorous.

Valva elongate-semiovate, hardly curved, broader than in the preceding species, with a rounded top; sacculus under $\frac{1}{2}$, with a sclerotized, pointed top; harpe club-shaped, less curved, shorter than in the preceding species, its top rounded. Anellus and aedeagus very much like those in *P. hexagona*. (Slide no. 891 D, holotype.)

Limen, a moderate rather weak transverse plate with the upper edge excavate in the middle. Above this edge two large bristly subrectangular plates, with rounded upper inner angles. Colliculum, a moderate tube. (Slide no. 1121 D, allotype.)

Lake Habbema, 3250—3300 m, August 20, 1938 (holotype, male), end July—end August, 1938 (allotype, female). Four specimens. Allied to *P. hexagona* spec. nov.

***Paralecta rhodometallica flagellata* subsp. nov.**

♂ 25 mm. Head and thorax creamy-white, the latter with the posterior half and the tips of the tegulae, touched with greyish-lilac, apical fourth suffused with greyish-lilac and dark fuscous, except a large round subapical spot of the ground colour. Palpus creamy-whitish, median segment above medianly, more or less infuscated. Abdomen ochreous-whitish, broad bands of orange-coppery bristles on the tergites 2—7, these bands triangularly dilated in the middle, becoming narrower posteriorly. Legs whitish-ochreous, anterior leg medianly suffused with golden-tawny. Fore wing subtriangular-ovate, dilated, costa curved, apex angularly pointed, termen straight, oblique. Whitish, faintly touched with pale lilac, with isabel gloss in certain lights, more than posterior half regularly sprinkled with dark fuscous-lilac. Costa narrowly suffused with light lilac-ochreous, basal fifth of the costal edge dark lilac-fuscous; dorsum anteriorly with a faint isabel suffusion, that is strongly and triangularly dilated at $\frac{2}{5}$ of the wing and is reaching the lower edge of the cell, posterior edge of the triangle edged with a suffused fuscous-lilac streak: this streak straight, to $\frac{2}{3}$ of the dorsum, narrowed and running along the dorsum to $\frac{3}{4}$, thence continued as a still narrower transverse fascia to below $\frac{3}{4}$ of the costa; this fascia almost vertical to above the fold, thence strongly outwards-angulate, angulation rather blunt, fascia above and beneath this angulation gently outwards-coneave, becoming gradually narrower and fainter above, indefinite below the costa; this fascia is preceded by a faint isabel-lilac suffusion. Cilia whitish with a faint coppery gloss, with a purple-lilac glossy apical band, strongly narrowed towards the apex, broadest in the tornus. Hind wing and cilia pale golden-ochreous.

Male genitalia show no differences from those of the typical form. (Slide no. 891 D, type.)

Sigi Camp, 1500 m, February 19, 1939. One specimen.

Arignota TURNER, 1897

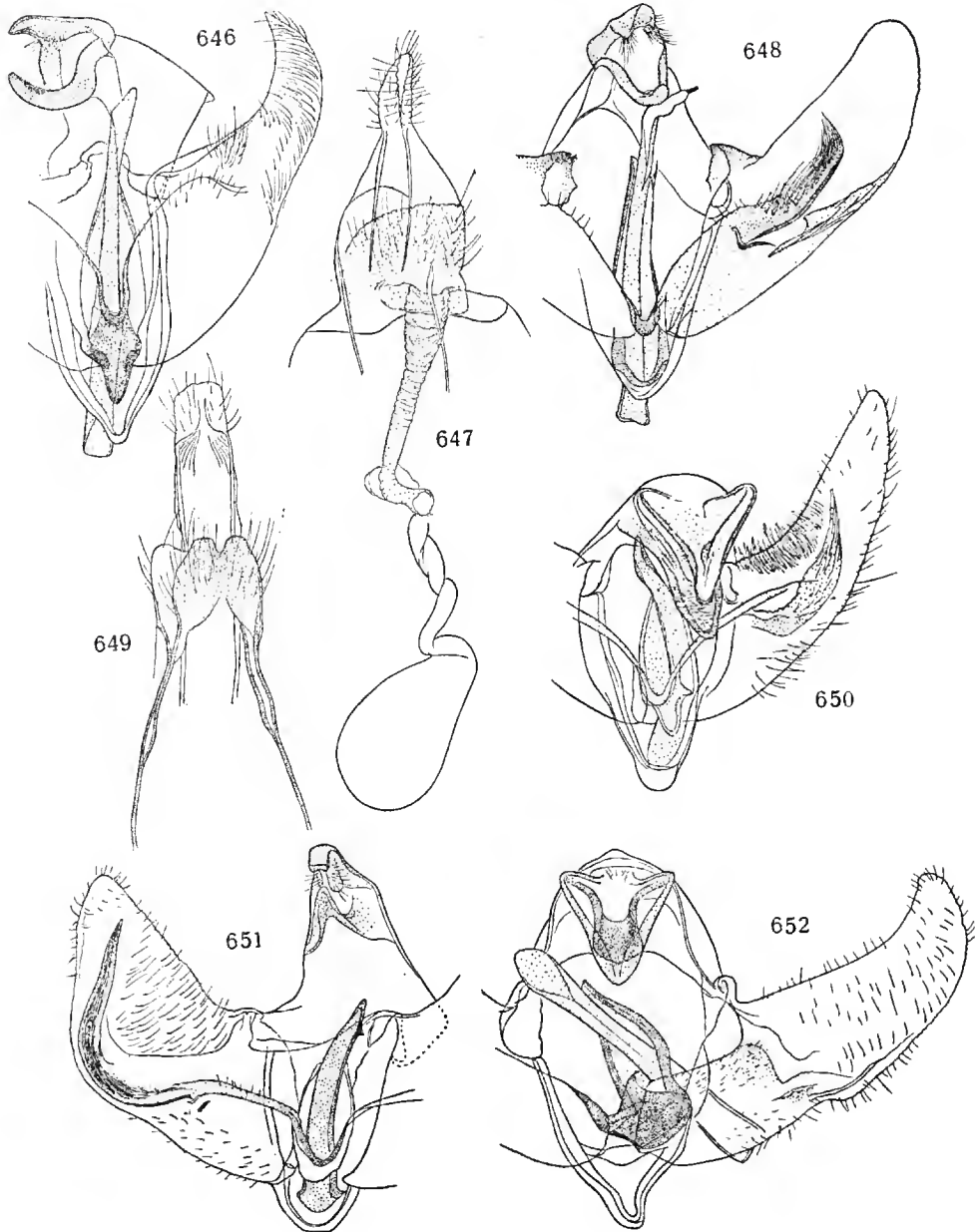
Arignota TURNER, 1897, Ann. Queensl. Mus., vol. 4, p. 21. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 23, 1929.

Head with long, loosely appressed scales, forming a roughish tuft over the face. Ocellus absent. Proboscis absent. Antenna in the female $\frac{2}{3}$, serrate, each serration with a minute fascicle of cilia at the apex, or filiform, minutely ciliate; scape moderately elongate, robust, with a small triangular scale-tuft at the apex beneath. Palpus moderately long, ascending, curved only at the base, median segment reaching just above the base of the antenna, or not reaching this; median segment moderately thickened with long smoothly appressed or rather rough scales, loose towards the apex, terminal segment about $\frac{1}{3}$ of the median or less, rather robust, acute. Thorax stout, broad, with very long loose hairs (damaged posteriorly; with a crest?). Abdomen stout. Anterior tarsus somewhat over 1, not thickened, clothed above with dense, closely appressed long scales, not reaching the apex, median and posterior legs long-hairy above and beneath. Fore wing without scale-tufts, 1b long-furcate, 2 from beyond $\frac{1}{5}$, 3 from the angle, 3—5 equidistant, remote, 7 and 8 stalked, 7 to the apex, 9 approximated to the stalk, 11 from beyond the middle. Hind wing rather short, semioval, $1\frac{1}{4}$, cilia about $\frac{1}{10}$, 2 from $\frac{3}{5}$, 3 and 4 short-stalked from the angle, 5 gently curved, moderately approximated, 6 and 7 closely approximated at the base, 8 connected with the upper edge of the cell by a very short transverse bar at $\frac{1}{3}$ of the cell.

This redescription is based on the characters of the female specimens of the following species, and differs in a few respects from the original description by TURNER. These differences are immaterial, in our opinion, and may be caused by sexual dimorphism as the genus is originally described after a male specimen. Our species differ from the genotype, *A. stercorata* (LUCAS) by minute ciliations of the antennae, shorter terminal segment of the palpi ($\frac{1}{3}$ or less, instead of $\frac{1}{2}$), not thickened anterior tarsi, little approximated veins 3—5 in the fore wing (in *stercorata* closely approximated), and vein 11 originating from beyond the middle.

Key to the Papuan species of *Arignota*

1. Female with antenna serrate; cilia in fore wing pure white, with broad black bars *decipiens* spec. nov.
- Female with antenna simple; cilia in fore wing light tawny-fuscous with pale ochreous base, with broad black bars *clavatrix* spec. nov.



Genitalia of Xyloryetidae. Fig. 646: *Pansepta tunsia* spec. nov., male. Fig. 647: *Pansepta languescens* spec. nov., female. Fig. 648: *idem*, male. Fig. 649: *Chironeura chrysocyma* spec. nov., female. Fig. 650: *Athrypsiastis chionodes* spec. nov., male. Fig. 651: *A. delicata* spec. nov., male. Fig. 652: *Pansepta splendens* spec. nov., male.

Arignota decipiens spec. nov. (fig. 655)

♀ 39 mm. Head white, mixed with blackish-purple. Antenna black. Palpus blackish-purple, median segment white below. Thorax covered

with long white, and blackish-purple hair-scales, a large median deep blackish-purple patch anteriorly, shining bluish in certain lights, extending over the tegulae which are white. Abdomen blackish purple, anteriorly with coppery posterior bands of fine bristles, posteriorly with whitish bands, venter yellowish, dark-banded. Anterior leg black, tibia white below and laterally (other legs broken). Fore wing elongate, little dilated, costa strongly curved at the base, moderately convex in the middle, slightly prominent at $\frac{3}{4}$, straight beyond $\frac{3}{4}$, apex obtuse, termen rounded, vertical above, oblique beneath. Pale ochreous-whitish tinged rosy, marked and irrorated with blackish-purple. A rather broad transverse streak from the base of the costa to the base of the dorsum, with an irregularly serrate edge; anterior $\frac{2}{3}$ of the costa with a narrow marginal streak, posterior third with four elongate longitudinal spots, broader than the preceding, alternating with four smaller transverse white marks, the last mark well before the apex; an oblique curved transverse mark on the closing vein, curved below and reaching anteriorly to before the base of vein 2, a coarse irregular irroration all over the wing, a rather broad terminal band of very dense irroration somewhat mixed with scales of the ground colour running from the costa before the apex, in the apex and along the termen to the tornus, slightly narrowed below, with small marginal groups of white scales corresponding with the white bars of cilia. Cilia dark bronze-fuscous, broadly and regularly barred with white. Hind wing rather pale greyish-ochreous-fuscous, marginal half suffused with bronze-brown, this suffusion dense along the wing edge; a suffused transverse dark bronze-brownish mark along the closing vein; cilia white, regularly barred with dark bronze-brown.

Ovipositor with an elongate, narrowed top. Limen, a curved transverse rod, and two haired plates above this rod. Ductus bursae membranous. Bursa simple. (Slide no. 974 D, type.)

Top Camp, 2100 m, January 25, 1939. One specimen. A robust insect, reminding of a Noctuid.

Arignota clavatrix spec. nov. (fig. 644)

♀ 4.5 mm. Head and thorax fuscous mixed with ochreous-white. Antenna fulvous, dark fuscous above. Palpus with the median segment dark fuscous above, lower (ventral) half and the fringe of scales pale ochreous, terminal segment fuscous mixed with pale ochreous, a basal ring and the tip whitish. Abdomen hairy, brownish-fuscous, faintly banded with pale ochreous, with transverse bands of coppery-golden setae, the band on the second tergite conspicuous, occupying its entire breadth; a preanal pale golden-ochreous band, mixed with fulvous laterally; sides of the abdomen blackish-fuscous. Legs ochreous-whitish mixed with fuscous-black, especially above, tarsi fuscous-black mixed with ochreous-white along the apical half. Fore wing elongate-subovate, costa gently curved

towards the extremities, faintly concave before the middle, apex obtuse, termen rounded, dorsum strongly bent at $\frac{1}{3}$. Pale ochreous, densely and irregularly (finer and coarser) irrorated with pale, and with dark fuscous. Costa finely irrorated with brownish-fuscous, from beyond the base to the middle, from $\frac{3}{5}$ to the apex with five blackish-fuscous elongate spots extending over the cilia; a streak of coarse fuscous irroration along vein 12. dilated in the middle; an ill-defined broad transverse band of sparse, coarse, dark fuscous irroration, from the upper edge of the cell to the dorsum at $\frac{1}{4}$; a dense dark coffee-brown inverted-clavate, inwardly oblique spot along the closing vein, lower extremity truncate by the fold, upper extremity slightly curved apicad; a cloudy fuscous band beyond this, curved, tolerably parallel to the termen and tending to be interrupted opposite the upper angle of the cell, narrowed below, from $\frac{2}{3}$ of costa, hardly reaching below vein 4; coarse and sparse irroration along the dorsum, confluent with the transverse bands and with the lower extremity of the clavate mark; a fuscous-tawny marginal suffusion from the apex to the tornus, narrowed below, marked with dark fuscous longitudinal suffused blotches from the apex to vein 4, more or less confluent with rounded blackish spots on terminations of veins, from the apex to the tornus; veins beyond the cell more or less streaked with fuscous. Cilia with the basal half ochreous-white, apical half light tawny-fuscous, from the apex to the tornus with broad blackish bars opposite the veins. Hind wing pale golden-ochreous tinged fuscous, a faint fuscous submarginal shade extended so as to form a suffusion between the cell and the apex, and a larger, more distinct shade occupying the tornal fourth of the wing; a suffused fuscous V-shaped mark along the closing vein, point basad; veins fuscous; margin of the wing slightly suffused with tawny and marked with blackish, suffused round dots on the terminations of the veins. Cilia light fuscous with pale base, and with blackish-fuscous bars opposite marginal dots from vein 8 to vein 1b; dorsal cilia darker fuscous.

Ostium indefinite, surrounded by membranous folds. Two ovate plates above the ostium, covered with very strong setae. (Slide no. 1119 D, type.)

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938. One specimen.

Cryptophasa MC LEAY, 1805 (fig. 653)

Cryptophasa MAC LEAY, 1805, in LEWIN, Lep. N. S. Wales, p. 11. WALSINGHAM, Lep. Het. Mus. Oxon., vol. 2, p. 542, 1900. MEYRICK, Exot. Microl., vols. 2—4, 1916—1930. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 61, 1929.

Nycterobius FREEMAN, 1852, Life of Kirby, p. 227 (*non descr.*).

Maroga WALKER, 1864, List Lep. Het. Brit. Mus., vol. 29, p. 827.

Zitua WALKER, 1866, *ibidem*, vol. 35, p. 1841.

Pilostibes MEYRICK, 1890, Trans. Roy. Soc. S. Austral., vol. 13, p. 26.

Cryptophasa, MEYRICK (emend.), *ibidem*, pp. 26—28, 1890.

Caenorycta MEYRICK, 1922, Entom. Mitteil., vol. 11, p. 45.

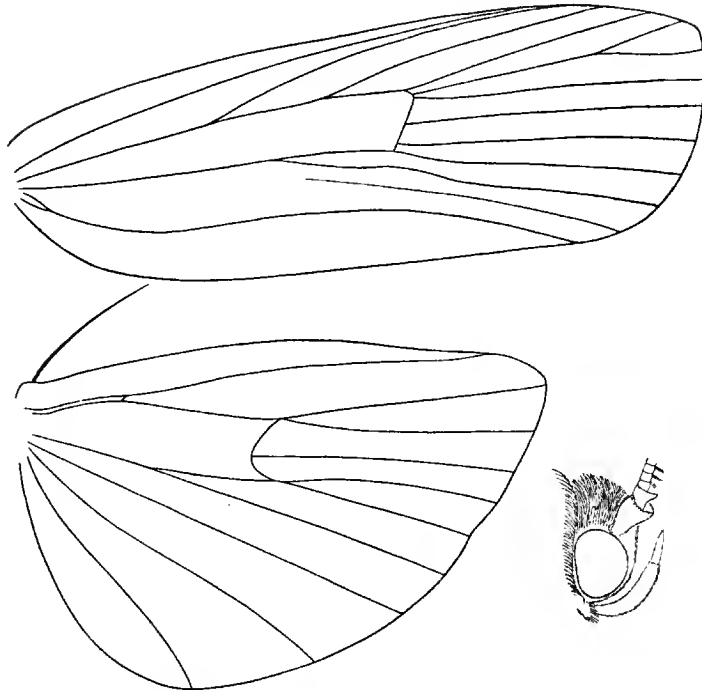


Fig. 653: *Cryptophasa chionotarsa* MEYRICK, male, wing neuration and head.

Key to the Papuan species of *Cryptophasa*

1. White or yellowish with longitudinal orange lines: costal, median and plical 2
Not thus 3
2. Large: 57 mm. whitish-yellowish *crococorda* MEYRICK
Smaller: 41 mm, glossy-white *amphicroca* MEYRICK
3. Median and posterior tarsi snow-white *chionotarsa* MEYRICK
Tarsi not thus 4
4. Markings confined to margins of fore wing or altogether absent. 5
Markings also discal, or only discal, sometimes faint or small, but still clearly perceptible 8
5. No markings, sometimes pale ochreous or greyish suffusion in dorsum or tornus 6
Not thus 7
6. Pale brownish-ochreous *vacuefacta* MEYRICK
Silvery-white *psiloderma* DIAKONOFF
7. Densely suffused throughout with dark fuscous *obscura*, spec. nov.
Whitish-ochreous, costal $\frac{1}{3}$ fuscous *phaeochta* MEYRICK
Brownish-lilac-fuscous, a triangular blackish spot on end of cell *hades* spec. nov.
8. Fuscous-purple, costa with a snow-white elongate spot posteriorly 9
Costa without such snow-white spot 10
9. A snow-white spot on dorsum before tornus, a minute one in tornus
. *chionacra*, spec. nov.
No such spots *chionosema* MEYRICK
10. Fore wing pale whitish-green, speckled with blackish, markings fulvous-brown
. *chlorotis* spec. nov.
Not thus 11

11. Discal markings, one or three minute blackish stigmata. 12
 Discal markings, more extended or suffused spots or patches 15
12. Snow-white, two-three stigmata 13
 One minute stigma on closing vein 14
13. Second discal stigma absent *luciflua* MEYRICK
 Second discal stigma present, with a few black scales below this
 *argophanta* MEYRICK
14. Violet-fuscous. *malevolens* MEYRICK
 Shining white. *neocrates* MEYRICK
15. Grey or pale ochreous mixed with reddish-fuscous, an elongate-ovate patch or
 an attenuated streak along base of costa white 16
 Not thus. 17
16. Grey, costal white patch elongate-ovate, extending along base of wing to
 dorsum *geron* spec. nov.
 Pale ochreous mixed with reddish-fuscous, costal streak attenuated, reaching
 to middle *ensigera* MEYRICK
17. Ground colour grey scattered with black, costal half from $\frac{1}{6}$ to $\frac{3}{4}$ suffused
 with white *crossosticta* MEYRICK
 Ground colour not thus 18
18. Costal half throughout or from beyond base to tornus much lighter than dorsal
 half 19
 Not thus. 20
19. A narrow brown median longitudinal line *dryoxantha* MEYRICK
 No such line *nesograptia* MEYRICK
20. Second discal stigma forming a transverse spot, dash or mark conspicuously
 darker than other markings 21
 Second discal stigma not darker than other markings 25
21. Discal stigma forming a well-defined large brown mark shaped as a tadpole
 *ranunculus* spec. nov.
 Discal stigma smaller, not thus shaped, sometimes suffused. 22
22. Head dark brown; ground colour white. *semmocrana* MEYRICK
 Head pale brownish-ochreous or white-ochreous; ground colour fuscous or
 greyish or pale ochreous. 23
23. Pale ochreous, costa suffused with light brown *psammochta* MEYRICK
 Greyish or fuscous. 24
24. Hind wing dark, sooty-fuscous *aethoptera* MEYRICK
 Hind wing grey tinged ochreous *aggesta* MEYRICK
25. More or less suffused with coffee-brown or fuscous, markings fuscous or blackish
 26
 More or less suffused with grey, markings grey or blackish. 31
26. Three discal stigmata forming large distinct blackish dots.
 *megalorma* MEYRICK
 Discal stigmata not thus pronounced 27
27. A large subterminal transverse white blotch from tornus reaching $\frac{3}{4}$ across
 wing. *homocrossa* MEYRICK
 No such blotch 28
28. A snow-white longitudinal streak above cell from base to $\frac{2}{5}$, another one from
 upper angle of cell to costa just before apex *niphadobela* spec. nov.
 Not thus. 29
29. Costal third except edge suffused with white, much paler than other parts of
 wing. *proleuca* DIAKONOFF
 Costal third not thus suffused or paler 30
30. A circular mark on middle of closing vein *pseudogramma* MEYRICK
 No such mark *sepiogramma* MEYRICK

31. A row of blackish dots along posterior half of costa becoming smaller towards apex. *arythmologa* MEYRICK
 Costal dots, if present, not thus 32
32. Discal markings: a group of round leaden-grey spots along median third of disc *curialis* MEYRICK
 Discal markings not thus 33
33. Male with two greyish spots on closing vein centred with black, sometimes a ferruginous subterminal band, female with ferruginous suffusion more or less extended anteriorly, sometimes forming a long outward loop from middle of cell to before termen *iorhypara* spec. nov.
 Discal markings blackish, irregular, not thus arranged . *oecodoma* MEYRICK

***Cryptophasa arythmologa* MEYRICK, 1938**

Cryptophasa arythmologa MEYRICK, 1938, Trans. Entom. Soc. Lond., vol. 87, p. 517.

Distribution: Netherlands North New Guinea, Cyclops Mountains. Araucaria Camp, 800 m, March 9—19, 1938. Rattan Camp, 1200 m, February 19, 1939. Top Camp, 2100 m, January 22, 1939. Ten males, 47—53 mm. With the dark markings moderately varying: the ocellus on the closing vein is more or less distinct, sometimes connected with costa by an oblique suffused dark streak, sometimes almost obliterate.

***Cryptophasa pseudogramma* MEYRICK, 1930 (figs. 669, 670)**

Cryptophasa pseudogramma MEYRICK, 1930, Exot. Microl., vol. 4, pp. 14—15.

Distribution: New Guinea, Sudest Island, Mount Rice: 2000 feet.

♀ 50—57 mm. Head white, a transverse band between the bases of the antennae and side-tufts, mixed with light grey. Palpus white, basal half laterally suffused with blackish. Thorax whitish tinged pale ochreous, moderately mixed with greyish-fuscous. Abdomen fuscous-grey. Legs whitish, mixed with dark grey, anterior tarsus blackish, white-ringed, posterior leg whitish, tibia clothed with long dark grey hairs above. Fore wing elongate-truncate, moderately broad, dilated to the middle, costa moderately curved, more so anteriorly, apex very blunt, termen little rounded, vertical above, more rounded, moderately oblique beneath. Whitish tinged pale ochreous, suffused with grey except along costa, densely irrorated with dark fuscous; markings dark fuscous. Base of costa moderately infuscated; five suffused spots along the costa from slightly before the middle to the apex, becoming smaller and more approximated posteriorly; a transverse vertical patch in the middle of the disc at $\frac{1}{3}$, reaching from the upper edge of the cell to the fold, somewhat constricted in the middle, top rounded, base dilated; preceded by a moderate longitudinal spot above the fold; a circular mark on the upper angle of the cell, more or less connected by a dark irroration with the first costal spot; a second, less regular, ring-like mark, more shifted basad, somewhat larger

than the preceding, often open above; dark speckling denser along the dorsum and on the posterior fourth, but not reaching the terminal edge, which bears a series of small transverse streaks on the terminations of the veins. Cilia fuscous-whitish, suffused with light grey, a basal series of transverse dark fuscous streaks corresponding with those along the termen. Hind wing dull greyish-fuscous, cilia fuscous-grey with a pale base.

Ostium moderate, limen a broad weak plate, deeply emarginate and almost parted in the middle, median rim somewhat thickened; dorsal wall of the ostium, a large ascending bristled plate with subtrapezoid upper edge. Colliculum, a small sclerotized tube. (Slide no. 908 D, neallotype.)

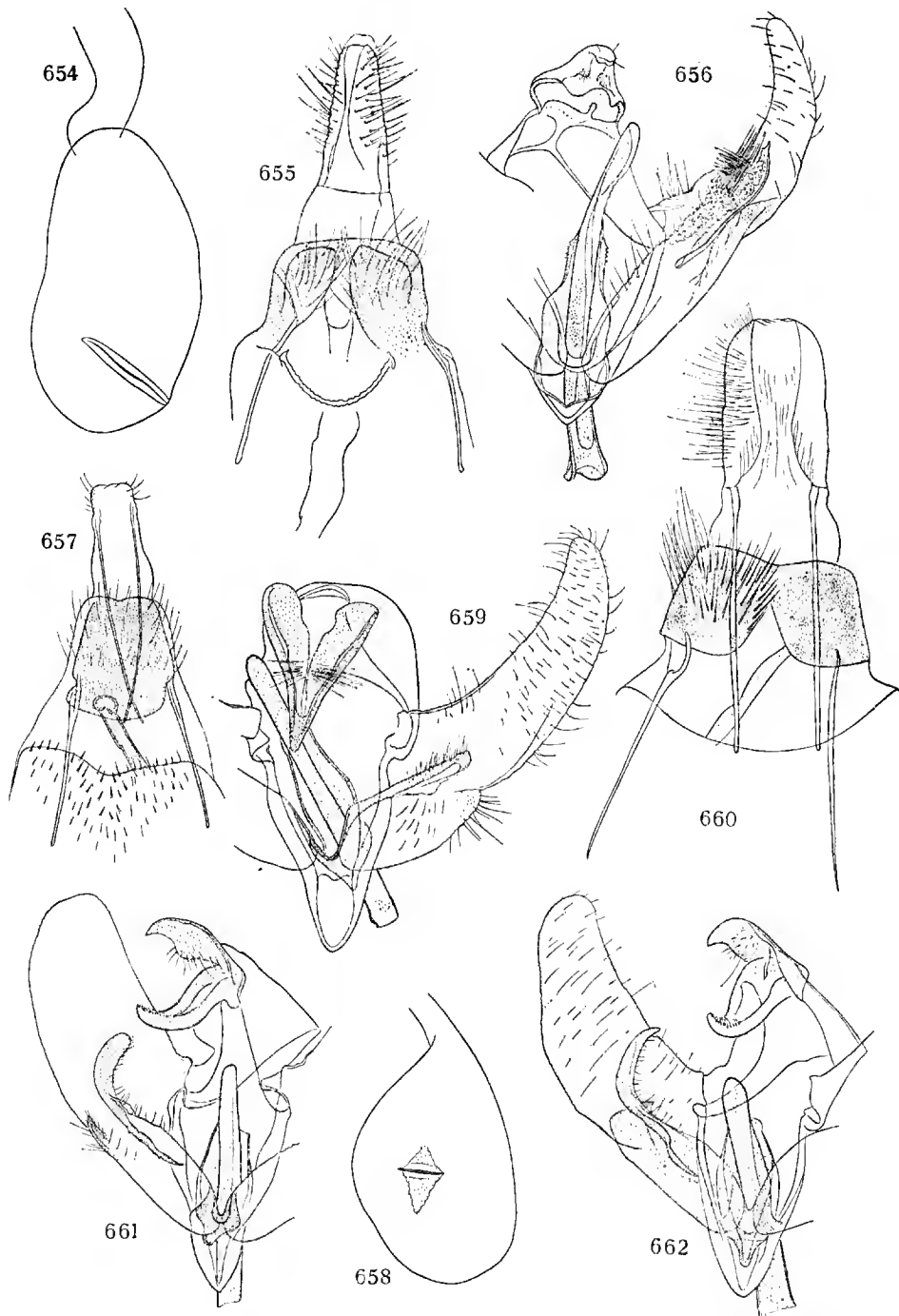
Neallotype ♀: 54 mm, Baliem Camp, 1600 m, December 10, 1938.

Tegumen moderate. Socii thickened. Valva rather narrow, apex blunt, a little curved; sacculus under $1/2$, ending in a short truncate process; harpe gradually narrowed, serrulate above, pointed. Vinculum moderately long, rather broad. Anellus very long, tubular. Aedoeagus long, with a bulbate base. (Slide no. 870 D.)

Baliem Camp, 1600—2000 m, November 10—December 16, 1938. Mist Camp, 1800 m, January 26, 1939. 20 males, 35 females. ♂ 37—47 mm, ♀ 50—57 mm. A rather varying species, as to the degree of the dark irroration of the fore wing in the two sexes that obscures the discal markings. Sometimes the circular discal spots are confluent and form one reniform transverse mark, centred with whitish, and dark-edged.

***Cryptophasa obscura* spec. nov. (fig. 671)**

♂ 43 mm. Head creamy-white. (Palpi broken.) Thorax dark fuscous, mixed with creamy-white, apical third except the edge and the shoulder, creamy-white, patagium enlarged, grey. Abdomen dark fuscous, long-haired, narrow transverse bands of fine orange bristles showing through scales along the posterior edges of the tergites. Legs, anterior blackish-fuscous, median creamy, banded with blackish-fuscous above, posterior leg creamy, tibia infuscated above, tarsal segments with black basal rings. Fore wing elongate-subtruncate, little dilated, costa slightly curved at the base, gently convex in the middle, straight posteriorly, apex obtuse, termen straight, vertical above, rounded beneath. Pale fuscous, very densely suffused with dark fuscous. A small creamy oblique patch on the base of the costa, reaching $1/3$ across the wing; posterior $3/4$ of the costa with a very narrow creamy streak, interrupted by five elongate marks of dark fuscous suffusion on the terminations of the veins 12—8, becoming smaller posteriorly; an ill-defined streak of the ground colour along the upper edge of the cell from the base to before the middle of the wing; apical and terminal fifth of the wing less irrorated, only with suffused longitudinal dark fuscous streaks along veins not reaching termen; a row of small ovate marginal dots on veins from the apex to the tornus. Cilia



Genitalia of Xyloryctidae. Fig. 654: *Chironeura chrysocyma* spec. nov., female, bursa copulatrix. Fig. 655: *Arignota decipiens*, spec. nov., female. Fig. 656: *Niphorycta hemipercna* spec. nov., male. Fig. 657: *Paralecta acutangula* spec. nov., female. Fig. 658: *idem*, bursa copulatrix. Fig. 659: *P. conflata* spec. nov., male. Fig. 660: *Cryptophasa chlorotis* spec. nov., female. Fig. 661: *Paralecta rhodometallica* spec. nov., male. Fig. 662: *P. hexagona*, spec. nov., male.

pale fuscous-whitish, apical third light greyish-fuscous, a shadowy fuscous median band forming darker bars opposite the marginal dots, almost interrupted between these bars. Hind wing rather dark greyish-fuscous with a bronze gloss, veins dark brown; cilia whitish, with a grey ante-median shade.

Male genitalia very similar to those in *C. pseudogramma*. Tegumen longer, narrower. Valva longer, apex more blunt, not curved; sacculus over $\frac{2}{5}$, apex with a blunt hook above; harpe less gradually narrowed, its top slightly curved, less pointed. Vinculum longer, narrower, its free part longer and more pointed. (Slide no. 873 D, type.)

Moss Forest Camp, 2600—2800 m, October 23, 1938. One specimen. Closely allied to *C. pseudogramma* MEYRICK in which, however, the dark suffusion of the wing is never so intense as to obscure the discal marks entirely; the male genitalia are also sufficiently different.

***Cryptophasa curialis* MEYRICK, 1925 (fig. 673)**

Cryptophasa curialis MEYRICK, 1925, Exot. Microl., vol. 3, p. 149; *ibidem*, vol. 4, p. 14, 1930. Trans. Ent. Soc. Lond., vol. 87, p. 516, 1938.

Distribution: Netherlands New Guinea: Nomnagihé, 2000 feet; Utakwa River, 3000 feet; Weyland Mountains, 6000 feet; Papua: Mafulu, 4000 feet, and Kokoda, 1200 feet.

Basal $\frac{2}{3}$ of the median segment of the palpi suffused with black below; two minute longitudinal jet-black marks on the upper and the lower angles of the cell in the fore wing which are not mentioned in the original description; they are especially distinct in paler forms. Abdominal tergites covered with small fine coppery-reddish bristles, almost entirely concealed by dense woolly scaling. We could discriminate three following distinct subspecies of this considerably varying species, corresponding with the altitude of the localities.

***Cryptophasa curialis curialis* MEYRICK (fig. 673)**

Rather pale; leaden-grey spots scattered all over the disc from the base to before the termen, rounded, less confluent; costa and dorsum white, not suffused. Discal black points present, subterminal distinct.

Tegumen moderate. Gnathos with a robust top. Valva gradually narrowed and moderately curved from the middle; sacculus about $\frac{1}{2}$, apex forming a thickened pad with a pointed horn, directed obliquely basad; harpe bent beyond its apex, rather broad, with a moderately rounded top, its upper surface dentate, its lower edge concave in the middle. Anellus broad, about $\frac{1}{2}$ of the aedoeagus which is rather thick, with a gradually dilated base. (Slide no. 893 D.)

Araucaria Camp, 800 m, March 8—26, 1929. Four males.

Cryptophasa curialis clarinota subsp. nov.

Darker coloured; leaden-grey spots more or less connected by a pale fuscous suffusion, covering the dorsum except its extremities and the disc to below the costa; often there are grey spots on the costa beyond the base, and at $\frac{1}{3}$; terminal markings very distinct; subterminal grey fascia anteriorly with a series of jet-black longitudinal marks on veins 7—1c, and with a series of fulvous transverse terminal blotches on the ends of the veins, sometimes almost forming a continuous fascia.

Rattan Camp, 1150 m, February 6, 1939; 1200 m, February 19, 1939 (holotype), February 19—23, 1939. Sigi Camp, 1500 m. Nine males.

Cryptophasa curialis pallida subsp. nov.

Very pale; grey discal markings faint, posteriorly not reaching beyond $\frac{3}{5}$, mostly reduced to three to five spots, often almost entirely vanished, then the upper black mark on the end of the cell conspicuous; subterminal black marks ill-defined. Sometimes the central part of the dorsum slightly suffused.

Mist Camp, 1800 m, January 9—February 19, 1939. Top Camp, 2100 m, January 22, 1939. Iebèlè Camp, 2250 m, February 17, 1938 (holotype), February 17—24, 1939. Moss Forest Camp, 2800 m, October 17, 1938. Twelve males.

Cryptophasa iorhypara spec. nov. (figs. 664, 677)

ῥός = rust, *ῥυπαρός* = dirty

♂ 34—36 mm. Head, thorax and abdomen white, touched with creamy, apex of the thorax with a large triangular chocolate-coloured spot, third abdominal tergite with a triangular coppery transverse band. Palpus white, median segment with the basal half above suffused with tawny, terminal segment over $\frac{1}{3}$. Antenna brown, mixed with white scales, scape white. Legs creamy-white. Fore wing elongate-subovate, moderately broad, costa little curved at the extremities, more so anteriorly, gently concave in the middle, apex rounded-rectangular, termen straight above, rounded beneath, vertical. White, touched with creamy, glossy. Base of the costal edge suffused with tawny; three hardly perceptible pale greyish-lilac suffused spots in the cell, forming an inverted triangle, two small spots of deep coffee-brown irroration on the closing vein; an irregular cloudy pale greyish-lilac suffusion along the dorsal half of the wing to the fold, accentuated by sparse scattered lilac-tawny scales towards the dorsum; a faint greyish-lilac shade forming an almost circular loop from beyond the lower angle of the cell to beyond its upper angle, reaching $\frac{2}{3}$ the distance from the cell to the termen; the lower extremity of this mark

sometimes dilated, so as to form a cloudy greyish-lilac somewhat oblique patch between the lower angle of the cell and the tornus, irrorated with greyish-fulvous and ferruginous scales; sometimes the ferruginous irroration extended along the loop-shaped suffusion as far as vein 7, thus forming an ill-defined, strongly curved broad transverse streak, more distinct on the veins; a subterminal row of dark lilac-ferruginous dots on veins 7—2, parallel to the termen, and a terminal row of larger, triangular, somewhat suffused fulvous dots, the space between this and the preceding row suffused with pale brownish-lilac. Cilia pale greyish-lilac, the basal third white, a darker greyish-lilac antemedian band. Hind wing glossy white, edge golden-tinged. Cilia white, a pale rosy-fulvous apical patch.

Male genitalia similar to those in *C. curialis*. Tegumen shorter. Valva much shorter; sacculus over $\frac{1}{2}$, top not modified, bristled; harpe broader and shorter, strong, bristled above, top truncate. Anellus long, about $\frac{2}{3}$ of the aedoeagus which is long, slender, with a bulbate base. (Slide no. 894 D, holotype.)

♀ 35—44 mm. Head and thorax as in the male, collar sometimes suffused with light lilac-fulvous. Abdomen with tergites 3—8 bearing coppery-orange transverse bands posteriorly which are dilated in the middle and become narrower on each following segment. Legs slightly mixed with greyish-lilac, tibiae suffused with fuscous above. Fore wing broader than in the male, costa curved throughout and slightly prominent at $\frac{1}{4}$ and $\frac{2}{3}$; costal edge suffused with greyish-lilac to the middle; a narrow streak of lilac-grey suffusion just below vein 12 from beyond the base, where it forms a short transverse streak, to $\frac{2}{5}$ of the wing; a broad irregular streak of cloudy deep coffee-brown suffusion from the upper angle of the cell at $\frac{1}{3}$, forming a large loop posteriorly and almost reaching the subterminal row of dots, ending in a rounded spot below the cell at $\frac{1}{3}$, narrowed and almost interrupted below the costa posteriorly, broadly dilated on the lower half of the cell, but almost interrupted by an oblique streak of the ground colour running across the disc and directed towards the tornus; a streak of dark coffee-brown irroration along the dorsum below vein 1b; subterminal dots larger and darker than in the male, connected with the termen by a lilac-grey suffusion, terminal dots as in the male. Cilia darker lilac-grey, with basal third white. Hind wing white with a golden gloss, margin suffused fuscous-golden; cilia white, a dark grey patch in the apex, a row of smaller and fainter median spots along the upper third of the termen, becoming smaller and paler downward.

Ostium moderate; limen, a broad transverse band deeply excavated in the middle, its median edge thickened; upper edge of the seventh ventrite indent. Colliculum, a moderate narrow tube, open along one side. (Slide no. 909 D, allotype.)

Baliem Camp, 1600—1700 m, December 10, 1938 (holotype, male), December 11, 1938 (allotype, female), November 16—December 12, 1938. Ten males, five females. Closely allied to *C. curialis* MEYRICK, distinct by

the reduction of the leaden-grey discal spots, by the ferruginous irroration, and by the genitalia.

Cryptophasa aggesta MEYRICK, 1925

Cryptophasa aggesta MEYRICK, 1925, Exot. Microl., vol. 3, p. 147. Trans. Ent. Soc. Lond., vol. 87, p. 516, 1938.

Distribution: Netherlands New Guinea: Utakwa River, 3000 feet. British New Guinea: Dampier Island, 3000 feet; Papua, Mafulu, 4000 feet; Kokoda, 1200 feet.

♀ 55 mm (neallotype). Palpus darker greyish-fuscous. Abdomen with a broad orange-coppery band of fine bristles on the dorsum of the second segment. Fore wing broader, dilated, costa considerably curved towards the extremities, especially anteriorly, less curved in the middle, apex obtusely angular, termen little rounded above, more so beneath. Fuscous-whitish, costal half gradually suffused with fuscous, this suffusion broader and darker than in the male, transverse outwardly convex mark on the closing vein broader and more conspicuous: fuscous-blackish; the entire wing more distinctly speckled with fuscous-blackish. Hind wing darker, evenly fuscous, with faint bronze gloss, cilia somewhat paler, with a fine pale basal line. Otherwise as the male and, in my opinion, undoubtedly conspecific.

Rattan Camp, 1200 m, February 17 and 23, 1939. Two males. Araucaria Camp, 800 m, February 21, 1939: neallotype, female. Three specimens.

Cryptophasa chlorotis spec. nov. (fig. 660)

χλωρότης = greenish

♀ 33—48 mm. Head and thorax greenish-white, mixed with blackish. Palpus pale greenish-white, basal segment throughout and median segment except its apex, suffused with fuscous, sometimes the upper edge of the median segment spotted with blackish, terminal segment with the basal half fuscous, apical greenish-white, or this segment entirely fuscous. Abdomen pale ochreous, densely suffused with fuscous except the anal tuft and the ill-defined anterior edges of segments, this suffusion forming ill-defined transverse bands posteriorly, third segment with a broad dorsal band of fine shining coppery-orange bristles. Legs whitish tinged greenish, more or less infuscated and mixed with blackish, tarsi brown. Fore wing elongate, dilated, truncate, costa curved at the base, slightly concave in the middle, before the apex oblique, curved, apex obtusely pointed, termen moderately rounded, little oblique. Pale whitish-green, coarsely speckled with blackish, markings blackish and fulvous-brown. A narrow suffused light tawny streak along $\frac{2}{3}$ of the costa, followed by four

large blackish dots, posterior dot subapical; blackish speckling arranged as follows: a subcostal streak, a very coarse longitudinal patch on the anterior half of the cell, sparse speckling along the dorsum extending posteriorly to before the tornus, running thence to $\frac{3}{4}$ of the costa, so as to form a broad irregular transverse band which is angulate posteriorly and almost interrupted at $\frac{1}{3}$; a small blackish suffused dot below the costa beyond the base; an inwardly oblique transverse fulvous-brown mark on the end of the cell, continued along the lower edge of the cell to before the middle of the wing, dilated to a round spot on the upper, and the lower angles of the cell, the upper spot mixed with blackish; anterior part of the transverse mark connected with a suffused blackish spot in the fold beyond its middle; a terminal band of small ovate bright fulvous-brown rings on the terminations of the veins, from the apex to the tornus, broadly interconnected, on the upper half of the wing suffused anteriorly, on the lower half almost open; this band edged anteriorly by a blackish irroration which becomes broader above and forms a triangular spot at $\frac{1}{4}$ of the wing breadth, projecting anteriorly and connected with the preceding transverse band of black speckling. Cilia with the basal half pale greenish-white, with a series of short transverse black streaks, posterior half tawny, cilia in the tornus entirely whitish-green, with a black bar. Hind wing glossy light golden-fuscous, apex tawny-golden. Cilia pale fuscous, with a faint interrupted blackish median line, and a white base.

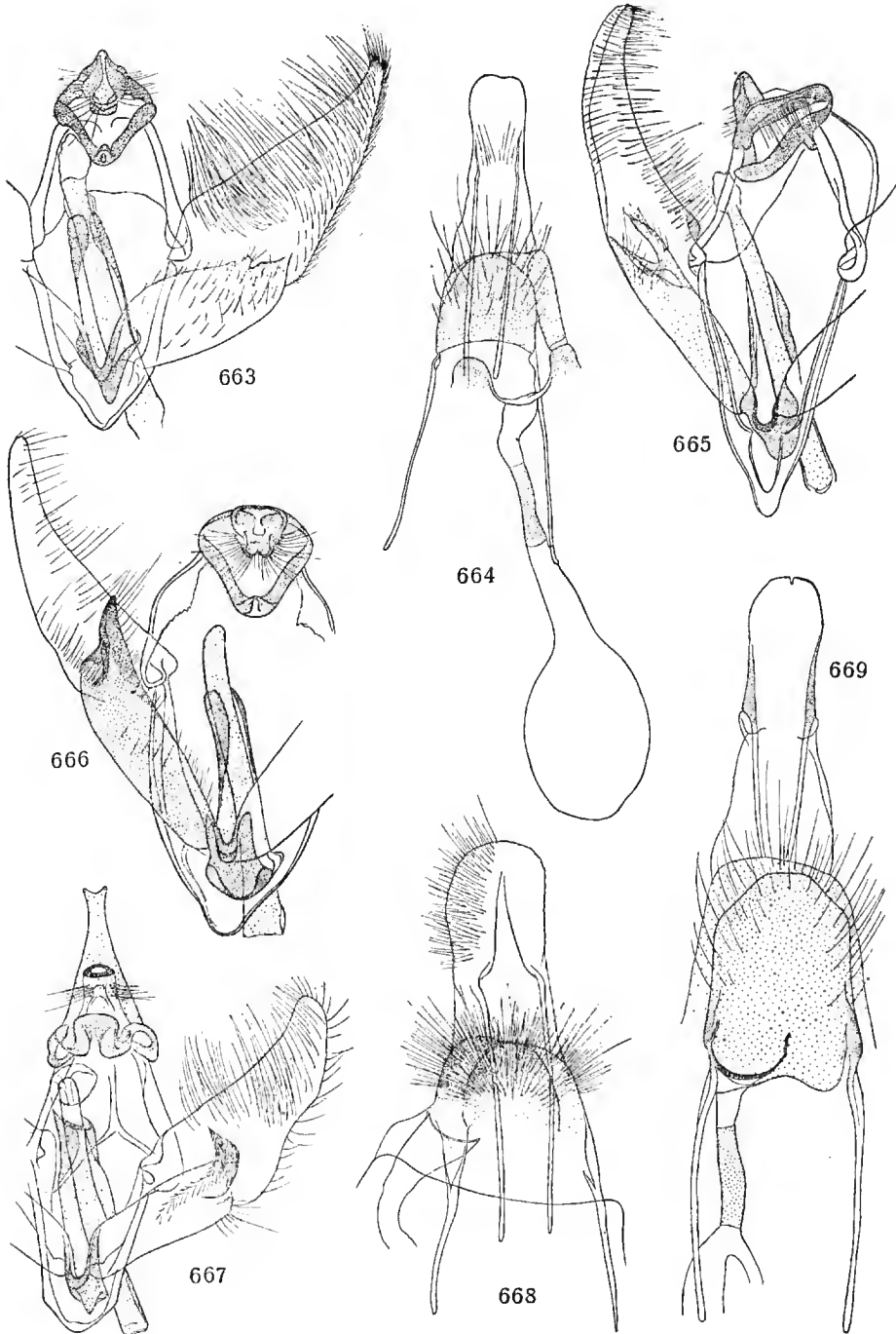
Ovipositor elongate, robust. Seventh sternite hairy, with a deeply notched anterior edge. (Slide no. 895 D, holotype.)

Rattan Camp, 1200 m, February 23, 1939; Baliem Camp, 1600 m, November 14, 1938 (holotype). Two specimens. A distinct species, obviously intermediate between the group of *C. nesograptus* MEYRICK, and that of *C. aggesta* MEYRICK.

Cryptophasa niphadobela spec. nov. (fig. 668)

νιφάς = snow, *βέλος* = arrow

♀ 46 mm. Head whitish-ochreous, lower half of the face tinged pale ferruginous, tuft on the vertex ferruginous-tawny, with a pale base. Palpus pale ochreous, densely irrorated, and suffused with light greyish-fuscous. Thorax whitish, a narrow band anteriorly and apex, dark ferruginous, patagium and tegula whitish, slightly mixed with tawny. Abdomen dark fuscous, apical tuft pale ochreous. Legs pale ochreous, densely suffused above and laterally with fuscous-grey, except the articulations. Fore wing elongate-subovate, moderately broad, costa moderately curved along $\frac{3}{4}$, apical fourth less curved but oblique, apex rather blunt, subrectangular, termen almost straight above, rounded beneath, little oblique. Fuscous-grey, tinged purple, the ground colour tending to form longitudinal stripes; costa narrowly suffused with fuscous-tawny, posterior fourth



Genitalia of *Cryptophasa*. Fig. 663: *chionacra* spec. nov., male. Fig. 664: *iorhypara* spec. nov., female. Fig. 665: *hades* spec. nov., male. Fig. 666: *chionotarsa* MEYRICK, male. Fig. 667: *geron* spec. nov., male. Fig. 668: *niphadobela* spec. nov., female. Fig. 669: *pseudogramma* MEYRICK, female.

suffused with whitish-ochreous, which colour is interrupted by small longitudinal dark fuscous marks on the terminations of the veins 11—9; a moderate subcostal darker grey streak from the base to before the apex, scattered with a few white scales; a suffused white streak just above the cell from the base to about $\frac{2}{5}$, another one, narrow, well-defined, from the upper angle of the cell to the costa just before the apex; an irregular narrow deep brownish-ferruginous streak just below these two streaks, running from beyond the base to before the apex, and interrupted before the middle of the wing; its lower edge bearing a small narrow transverse appendix at $\frac{1}{3}$ of the cell, a small triangular one at $\frac{2}{3}$, and two larger diverging short lines forming an invert V on the end of the cell, closed below by a very faint curved line; preceding streak edged below in the middle of the disc by whitish-ochreous suffusion tinged pale pink; a suffused, subtriangular deep ferruginous spot in the fold before the middle of the wing; base of the wing and of the dorsum whitish, mixed with bright ferruginous scales; a moderate deep fuscous-purple terminal band, slightly irrorated with whitish-ochreous anteriorly; a row of faint suffused triangular fulvous-tawny dots on the ends of the veins, continued as faint streaks on the veins: in the apex and along the termen to the tornus, apical spot largest; dark fuscous-purple scales scattered all over the wing. Cilia pale ochreous with a faint tawny antemedian line, broadly barred with brown, basal half of the bars blackish. Hind wing dark fuscous-bronze, paler towards the costa, with a coppery gloss, which becomes purplish towards the dorsum; cilia concolorous with those of the fore wing, bars less numerous towards the dorsum, their blackish bases extending over the edge of the wing as small semicircular spots.

Ostium simple. Limen, a narrow transverse rod. Two large rounded lobes above the ostium, covered with dense, rather fine bristles. (Slide no. 875 D, type.)

Araucaria Camp, 800 m, March 11, 1939. One specimen. Nearest to *C. sepiogramma* MEYRICK.

Cryptophasa ranunculus spec. nov. (fig. 676)

♂ 41—48 mm. Head and patagia very densely scaled, fuscous-brown, tips of the scales pale. Antenna dark fuscous, towards the base above whitish. Palpus pale fuscous-tawny becoming pale whitish-tawny towards the apex, median segment with the dorsal half suffused with dark fuscous. Thorax with the anterior half (partially concealed by the tegulae) deep coffee-brown, posterior half pale ochreous-lilac, tegula pale ochreous touched with lilac, basal third deep coffee-brown, edge of this colour well-defined, inwardly oblique. Abdomen densely haired, light golden-ochreous, dorsally tinged greyish anteriorly, brownish posteriorly, valvae clothed with long, dense, jet-black hair-scales. Legs densely haired, anterior

tarsus over 1, strongly thickened, ochreous suffused with brown, tibiae and tarsi dark brown above, anterior tarsus deep ferruginous. Fore wing with vein 2 from beyond $\frac{5}{6}$, 3—5 rather remote, equidistant, 7 and 8 stalked, to the termen; elongate, moderately dilated, broadest at $\frac{4}{5}$, costa little curved at the base, straight posteriorly, bent and prominent at $\frac{4}{5}$, gently curved beyond this point, apex obtusely angular, termen hardly rounded above, more so beneath, moderately oblique. Light glossy ochreous-fuscous, towards the base of the wing, and the base of the dorsum, suffused with pale ochreous; costal half suffused with dull brownish-fuscous, tinged lilac, this suffusion paler below, extending over the central part of the wing from $\frac{1}{6}$ to $\frac{4}{5}$; a faint transverse leaden-lilac glossy suffusion at $\frac{1}{4}$ extending over the lower $\frac{2}{3}$ of the wing, outwardly oblique, dilated on the dorsum, edging the above mentioned pale ochreous colouring of the wing base; a conspicuous deep coffee-brown mark on the end of the cell, in shape strongly reminding of a tadpole, formed by a round spot on the closing vein, with a short rounded projection above and a slender pointed appendix below, along the fold, pointing towards the tornus; a narrow suffused brown marginal streak from the apex to the tornus; sparse deep coffee-brown scattered scales becoming smaller towards the tornus; cilia light brownish-fuscous, tinged lilac, with a pale basal line. Hind wing densely long-haired on the dorsal third; light golden-ochreous-fuscous, glossy, somewhat darker fuscous posteriorly, cilia light golden-ochreous, tinged fuscous.

Valva rather short, narrowed from before the middle, top slender, curved; sacculus about $\frac{1}{2}$, ending in a sickle-shaped hook, with a streak of short bristles from before the middle to the top. Vinculum long. Anellus, one half the length of the aedoeagus. (Slide no. 877 D, holotype.)

Araucaria Camp, 800 m, March 10, 1939 (holotype), March 8—19, 1939. Five males. A very distinct species.

***Cryptophasa chionotarsa* MEYRICK, 1925**

Cryptophasa chionotarsa MEYRICK, 1925, Exot. Microl., vol. 3, p. 148.

Distribution: Netherlands New Guinea, Nomnagihé, South of Wangaar River, 2000 feet.

***Cryptophasa chionotarsa brunnea* subsp. nov. (figs. 653, 666)**

♂ 43 mm. Hind wing glossy deep fuscous-bronze, cilia fuscous-bronze, with a golden gloss (in the typical form the hind wing and the cilia, grey). Fore wing with the patch of white speckling before the termen rather ill-defined. Otherwise similar to the typical form.

Tegumen short. Top of the gnathos rather pointed. Valva narrow, with apical third slender; sacculus broad, $\frac{1}{2}$, ending in a strong pointed pro-

jection; harpe absent. Vinculum rather broad. Anellus over half of the length of the aedoeagus which is long, slender. (Slide no. 896 D, type).

Araucaria Camp, 800 m, March 17, 1939. One specimen.

***Cryptophasa hades* spec. nov. (fig. 665)**

♂ 42 mm. Head dark fuscous-grey, appearing almost blackish in certain lights, frons rather pale greyish-fuscous. Antenna brown, dark tinged, and sparsely covered with whitish scales. Palpus dark brownish-fuscous, terminal segment under $\frac{1}{3}$, pale fuscous, mixed with dark fuscous. Thorax with the anterior half and the anterior inner angle of the tegula, dull brownish-black, posterior half rather pale fuscous-grey; patagium thick-scaled, glossy dark fuscous-grey, tegula fuscous-lilac. Abdomen dark fuscous-grey, tinged lilac except the anal tuft, second tergite with a broad band of yellowish bristle-clothing, showing through scales. Legs dark fuscous, anterior tibia and tarsus triangular, being strongly dilated with dense brownish-black scales, flattened. Fore wing elongate-subovate, little dilated, costa hardly curved, bent at $\frac{3}{4}$, a_1 ex obtuse, termen moderately rounded, rather oblique. Deep brownish-lilac-fuscous, with a slight gloss, dorsum anteriorly slightly suffused with paler greyish-lilac, dorsal edge from beyond the base to the tornus, with a cloudy brownish-black suffusion: posterior fifth of the costa tinged deep coffee-brown; a transverse, erect-triangular small spot on the closing vein, dull coffee-black, broadly edged except below with greyish-white scales, dark colour of the spot partially showing through these scales; terminal edge suffused with deep coffee-brown. Cilia greyish-fuscous, with a narrow whitish basal line, and a broader dark fuscous subbasal one. Hind wing dark fuscous-bronze, golden-bronze between veins 7 and 8, whitish above the latter vein. Cilia dark fuscous with a narrow, still darker subbasal line.

Tegumen stronger than in the preceding species. Valva somewhat broader, moderately curved; sacculus under $\frac{1}{2}$, with a haired projection below its top, directed distad. Vinculum narrow. (Slide no. 907 D, type.)

Rattan Camp, 1200 m, February 23, 1939. One specimen.

***Cryptophasa psammochta* MEYRICK, 1925**

Cryptophasa psammochta MEYRICK, 1925, Exot. Microl., vol. 3, pp. 147-148.

Distribution: Netherlands New Guinea: Nomnagihé, South of Wangaar River, 2000 feet; Fakfak, 1700 feet; Snow Mountains: Utakwa River.

Mount Hager, 1650 m, February 18, 1938. One male. The thorax anteriorly is paler, and the abdomen less distinctly banded than in the type. Hollandia, sea level, April 1, 1938.

Cryptophasa dryoxantha (MEYRICK, 1922)

Caenorycta dryoxantha MEYRICK, 1922, Entom. Mitteil., vol. 11, pp. 45–46 (♂ British New Guinea). Exot. Microl., vol. 4, p. 15, 1930.

Cryptophasa mesotoma MEYRICK, 1925, l.c., vol. 3, p. 149 (♂, Moluccas). *Syn. nov.*

Distribution: British New Guinea, Biagi, Mambare River; Moluccas, Buru, 2700–5000 feet.

Rattan Camp, 1150 m, February 6, 1939. Araucaria Camp, 700 m, February 12, 1939. Top Camp, 2100 m, January 29, and February 7, 1939. Four males. The specimen from the Rattan Camp agrees in all details with the type specimen from Buru. The other two specimens are much paler, with indistinct markings, and bars on the cilia.

Cryptophasa nesograptia MEYRICK, 1925

Cryptophasa nesograptia MEYRICK, 1925, Exot. Microl., vol. 3, p. 150.

Distribution: Netherlands New Guinea: Weyland Mountains, 6000 feet.

Mist Camp, 1700 m, January 22, 1939. Top Camp, 2100 m, February 1, 1939. Two males. This species is described as having white ground colour in the fore wing. Actually it is distinctly tinged pale greenish, as we could state when studying the type at the British Museum. The specimen from Top Camp is pale, with discal markings faintly indicated.

Cryptophasa crocochorda MEYRICK, 1925

Cryptophasa crocochorda MEYRICK, 1925, Exot. Microl., vol. 3, p. 151.

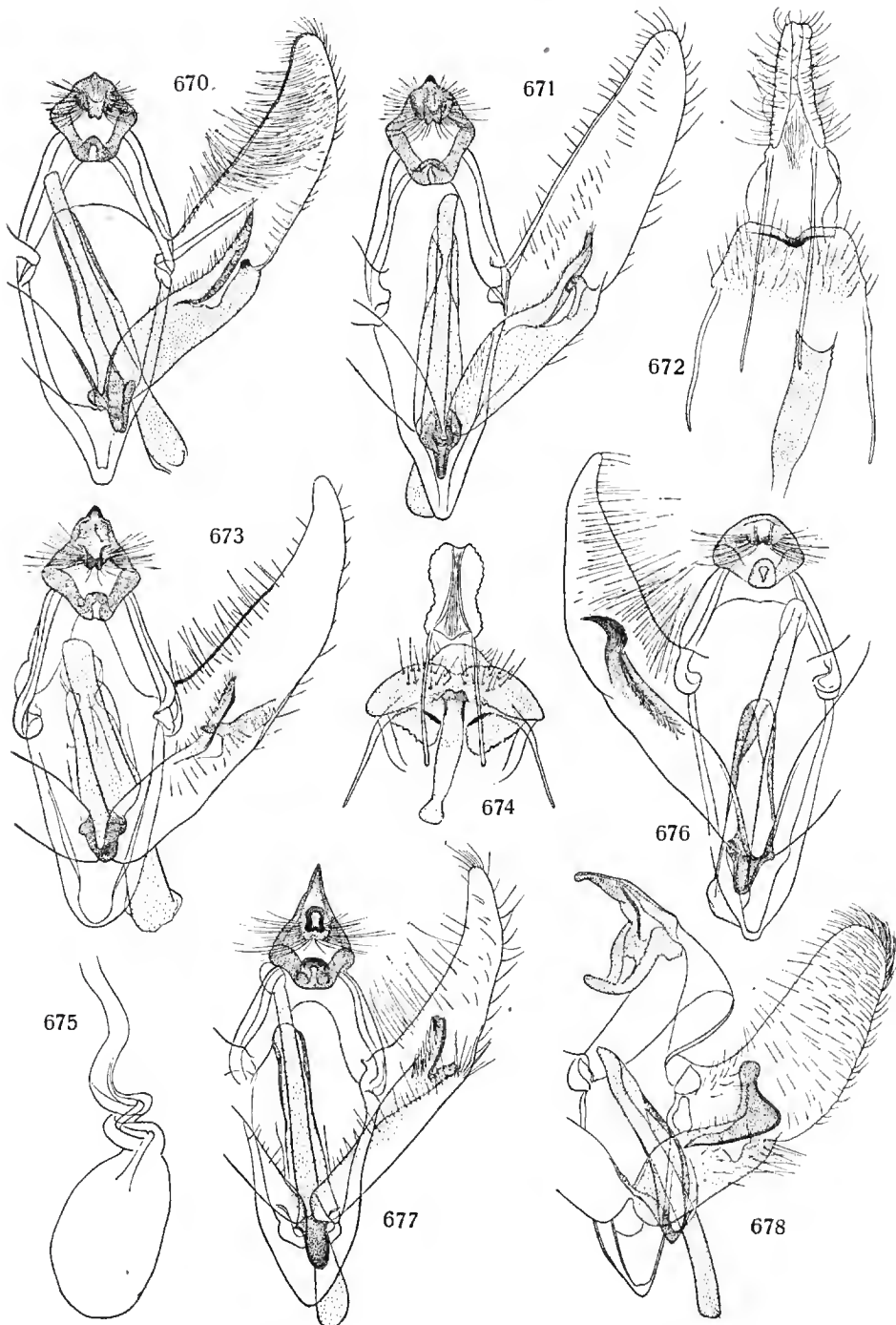
Distribution: Netherlands New Guinea, Weyland Mountains, 6000 feet.

Mist Camp, 1800 m, January 26, 1939. Mount Hager, 1650 m, February 18, 1939. Three males.

Cryptophasa chionacra spec. nov. (fig. 663)

χιών = snow, *ἄκρον* = marge

♂ 33–36 mm. Head blackish mixed with pale ochreous, less so on the vertex, face dark fuscous mixed with pale ochreous. Palpus with the basal and the median segments dark fuscous, terminal segment pale ochreous, irrorated with dark fuscous. Thorax fuscous, laterally suffused with fuscous-black in the middle and before the apex, tegula pale fuscous, tips of the scales dark fuscous. Abdomen dark fuscous, faintly banded with whitish-ochreous, dorsal bands of shining coppery-orange bristles on the posterior halves of segments. Pecten and venter whitish. Legs whitish, knees and median dorsal cilia of the anterior and the median tibiae, light ferruginous, of the posterior tibia, dark fuscous. Fore wing elongate, rather broad, costa slightly curved towards the extremities, gently convex



Genitalia of Xyloryctidae. Fig. 670: *Cryptophasa pseudogramma* MEYRICK, male. Fig. 671: *C. obscura* spec. nov., male. Fig. 672: *Xylorycta hypatolimnas* spec. nov., female. Fig. 673: *Cryptophasa curialis* MEYRICK spec. nov., male. Fig. 674: *Phthonevodes aristaepennis* spec. nov., female. Fig. 675: *idem*, bursa copulatrix. Fig. 676: *Cryptophasa ranunculus* spec. nov., male. Fig. 677: *C. iorhypara* spec. nov., male. Fig. 678: *Xylorycta hypatolimnas* spec. nov., male.

in the middle, apex very blunt, termen slightly rounded, little oblique. Rather light fuscous, densely and irregularly irrorated with deep blackish-purple. Base of the wing mixed with whitish-ochreous scales which are followed by a small and faint transverse blackish suffusion, not reaching the costa and hardly reaching the dorsum; anterior $\frac{2}{5}$ of the costa suffused with darker fuscous; a snow-white patch along the costa from beyond $\frac{2}{5}$ to well before the apex, rather narrow, elongate-semiovate, with its lower edge rather irregular, moderately suffused; two small suffused fuscous-purple dashes, on the terminations of veins 9 and 10, respectively, anterior dash almost separating a small white costal dot from the preceding white costal patch; a moderate transverse suffused discal spot on the closing vein, dilated below, deep purple; a ferruginous marginal band along the costa before the apex, in the apex and along the termen, edged anteriorly by an ill-defined deep purple transverse band, from below the costa to the tornus, gradually dilated above (below tending to fall apart in a row of spots on veins), running tolerably parallel to the edge of the wing, except above, where it is outwardly convex; a large round snow-white dot on the dorsum before the tornus followed by another minute dot, almost in the tornus. Cilia light ferruginous, broadly barred with black, a narrow pale ochreous basal line. Hind wing deep fuscous, an interrupted suffused pale ferruginous-ochreous marginal band in the apex and along the upper half of the termen; base and dorsum with dense long dark fuscous hairs. Cilia dark fuscous, posterior half, except towards the dorsum, glossy whitish-ochreous, with a pale ochreous basal line.

Valva broad, triangularly narrowed, apex slightly curved; sacculus very broad, under $\frac{1}{2}$, its upper edge with three blunt projections posteriorly. Vinculum moderate, rather broad. Anellus $\frac{2}{3}$. (Slide no. 876 D, holotype.)

Araucaria Camp, 800 m, March 10, 1939. Two specimens. Closely allied to *C. chionosema* MEYRICK.

Cryptophasa geron spec. nov. (fig. 667)

γέρον = grey-haired

♂ 32 mm. Head and scape of the antenna whitish, tinged pale ochreous. Palpus whitish, tinged pale ochreous, basal segment and median segment except its apical fourth, suffused with greyish-fuscous. Thorax whitish tinged pale-ochreous, suffused with fuscous-grey, becoming darker towards the apex. Abdomen whitish-ochreous, anal tuft ochreous-tawny. Legs light ochreous-tawny, anterior infuscated. Fore wing subtriangular, dilated, costa little curved, obliquely bent before the apex, apex blunt, termen hardly sinuate, almost straight, little oblique. Grey, faintly tinged lilac, becoming pale grey and irrorated with dark grey along the terminal fourth; costa throughout narrowly suffused with light ochreous-tawny; an elongate-ovate, whitish, tinged pale ochreous patch from the base of the costa to beyond $\frac{1}{3}$, this colour extending over the base of the wing

to the base of the dorsum; an ill-defined large semicircular bronze-tawny patch occupying the middle half of the dorsum and reaching to the middle of the wing, with a faint coppery gloss in certain lights; apex and termen to the tornus narrowly suffused with dark lilac-grey; a small dot of the same colour on the dorsum before the tornus. Cilia fuscous grey, pale grey in the tornus, an interrupted dark grey antemedian band, apical third of the cilia towards the apex of the wing, tinged fulvous. Hind wing glossy pale ochreous, veins and the apical and the terminal edges tinged tawny; cilia sordid ochreous-whitish, with a faint interrupted greyish antemedian shade.

Tegumen erect. Uncus long, with a bidentate top. Socii small. Gnathos strong, arms undulate, top truncate, robust. Valva narrowed, its lower edge concave, its top little curved, blunt; sacculus under $\frac{1}{2}$, broad, ending in a strong, curved, and pointed projection, with a streak of short bristles from its middle to the top. Vinculum rounded. Anellus $\frac{3}{4}$. (Slide no. 878 D, type.)

Mount Hager, 3650 m, March 17, 1939. One specimen. The shape of the uncus and the gnathos suggest a generic difference.

Cryptophasa ensigera MEYRICK, 1925

Cryptophasa ensigera MEYRICK, 1925, Exot. Microl., vol. 3, pp. 150—151.

Distribution: British New Guinea, Dampier Island.
Idenburg River, August 19, 1938. One male.

Stachyneura DIAKONOFF, 1948

Stachyneura DIAKONOFF, 1948, Treubia, vol. 19, pp. 191—192, fig. 3.

Key to the species of *Stachyneura*

1. Fore wing with cell suffused with rosy *iostigma* DIAKONOFF
- Fore wing with cell not suffused with rosy. *sceliphrodes* MEYRICK

Stachyneura sceliphrodes (MEYRICK, 1925)

Cryptophasa sceliphrodes MEYRICK, 1925, Exot. Microl., vol. 3, p. 150.

Stachyneura sceliphrodes, DIAKONOFF, Treubia, vol. 19, p. 192, fig. 3, 1948.

Distribution: Netherlands New Guinea: Nomnagihé, 2000 feet; Weyland Mountains, 6000 feet.

Bernhard Camp, 50 m, January 9, 1939. One female.

Eriogenes MEYRICK, 1925

Eriogenes MEYRICK, 1925, Exot. Microl., vol. 3, p. 159. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 84, 1929.

MEYRICK regarded this genus to be related with *Agriophara* (Stenomidae) which is certainly erroneous. The insect is a true Xyloryctid, is,

in our opinion, allied to *Cryptophasa*, and does not show any connections with the Stenomidae. Its neuration may remind of that in the latter family, but this resemblance is only superficial.

A few points may be added to the description of *Eriogenes*. The discoidal vein in the fore wing is weak between veins 5 and 6; in the hind wing this vein is angulate, and also rather weak between these veins; the upper edge of the cell is angularly bent towards vein 8 and is connected with it by a short cross-bar.

***Eriogenes mesogypsa* MEYRICK, 1925**

Eriogenes mesogypsa MEYRICK, 1925, Exot. Microl., vol. 3, pp. 159—160.

Distribution: British New Guinea, Kumusi River, low elevation; Goodenough Island, 2000—4000 feet. Moluccas: Ceram, 4600 feet.

Bernhard Camp, 50 m, January 9, 1939. One male, 35 mm.

***Xylorycta* MEYRICK, 1890 (fig. 679)**

Xylorycta MEYRICK, 1890, Trans. Roy. Soc. S. Austral., vol. 13, p. 57. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, pp. 175, 237, 1929 (synonym of *Phthonerodes*).

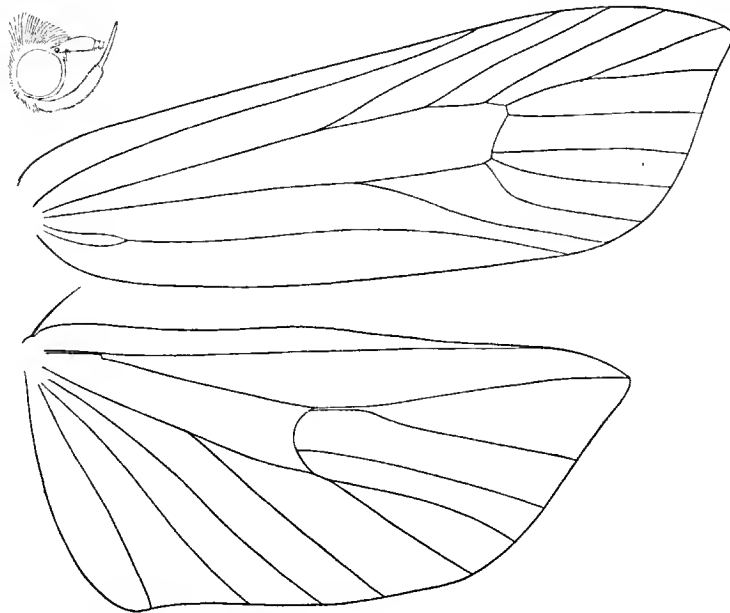


Fig. 679: *Xylorycta hypatolimnas* spec. nov., male, head and wing neuration.

The synonymy of the genus *Phthonerodes* MEYRICK in which *Xylorycta* is included by FLETCHER (*loc. cit.*), appears to be open to doubt. Mr. CLARKE stated when studying MEYRICK's types at the British Museum that *Xylorycta* is distinct from *Phthonerodes*. Mr. BRADLEY kindly sent us sketches of the neuration of the genotypes of these two genera, after the examination of which we readily agree with Mr. CLARKE.

As to the other surmised synonyms of *Phthonerodes*, *Lichenaula* MEYRICK, 1890, may indeed be its synonym. Whether *Clerarcha* MEYRICK, 1890, and *Tymbophora* MEYRICK, 1890, are synonymous with *Xylorycta* will become clear after Mr. CLARKE has published his studies. In that case *Clerarcha* has the priority of a few pages. Further names cited as synonyms by FLETCHER are *Chalarotorna* MEYRICK, 1890, *Illidgea* TURNER, 1897, and *Neodrepta* TURNER, 1897.

Key to the Papuan species of *Xylorycta*

1. Thorax white; ♂, 33 mm *atelaetis* MEYRICK
- Thorax white densely mixed with fuscous, top dark fuscous; ♂, 43 mm.
- *hypatolimnas* spec. nov.

Xylorycta hypatolimnas spec. nov. (figs. 672, 678, 679)

ὑπατος = high, *λιμνάς* = living at a lake

♂ 43 mm. Head white, face and side tufts suffused with fuscous. Palpus white, basal segment, and median segment except its apex and inside, dark fuscous. Thorax white, densely mixed with fuscous, apex dark fuscous. Abdomen ochreous-white, dorsum of segments evenly covered with fine coppery bristles, showing through the scales. Legs pale whitish ochreous, anterior dark fuscous-grey, except the articulations. Fore wing long, rather narrow, elongate-subtriangular, dilated, broadest at $\frac{4}{5}$, costa curved at the base, rather straight in the middle, bent and prominent at $\frac{4}{5}$, obliquely and moderately curved beyond $\frac{4}{5}$, apex angularly pointed, termen sinuate, moderately oblique. White, irrorated and marked with dark fuscous. Basal third of the costa narrowly suffused with dark fuscous, this suffusion dilated anteriorly, posterior $\frac{2}{3}$ of the costa narrowly tinged pale ochreous; a rounded large suffused fuscous spot at $\frac{4}{5}$ of the costa, mixed with white, almost connected below posteriorly with a larger round suffused patch in the middle of the disc, halfway between the cell and the termen, becoming pale and ill-defined anteriorly; an inwardly oblique wedge-shaped transverse dark fuscous mark on the closing vein, its lower end narrow, slightly curved inwards; a well-defined dark fuscous streak along the dorsum from beyond the base to the tornus, limited above by the course of vein 1b, extending above this vein at $\frac{2}{5}$ of the wing, so as to form a dentiform triangular projection, with acute apex pointing towards $\frac{3}{4}$ of the costa and reaching to the lower edge of the cell, posterior edge concave above, vertical below, running just above vein 1b; a second elongate-ovate, suffused projection at $\frac{2}{3}$, hardly reaching above vein 2; a suffused terminal streak, interrupted in the tornus, narrowed in the apex and reaching the costa; dark speckling denser along the costa and beyond the cell, almost absent below the cell; cilia white, barred with dark fuscous, with an interrupted antemedian blackish-fuscous fascia. Hind wing pale

whitish-ochreous, tinged pale bronze posteriorly; cilia pale ochreous, faintly and sparsely barred with pale bronze, infuscated opposite the apex.

Tegumen moderate. Uncus rather long, bluntly pointed, uncus pending along its basal third, its top porrect. Valva rather short, little narrowed, slightly excavate at the top of the sacculus, apex rounded; sacculus under $\frac{1}{2}$; harpe, a strong, sclerotized plate, with rounded distal projection, and a rising clavate top, inner edge short-haired. Vinculum rather pointed. Anellus moderate, about $\frac{1}{2}$. Aedoeagus slender, gently curved. (Slide no. 897 D, holotype.)

♀ 53 mm. Palpus with all segments fuscous-white, coarsely irrorated with fuscous. Abdomen whitish, dorsal clothing of bristles more distinctly showing through, dark bronze. Fore wing narrower, more bent and prominent at $\frac{4}{5}$. White, densely and evenly irrorated with dark fuscous, except an elongate-ovate white spot on the base of the dorsum, extending above to the middle of the base of the wing; dark markings much obscured by the above mentioned irroration, less conspicuous than in the male. A moderate suffusion at the base of the costa; a cloudy transverse mark on the closing vein; an ill-defined strongly outwards-curved transverse fascia from $\frac{4}{5}$ of the costa, almost connected with the dorsal markings; these are the same as in the male but only indicated, strongly suffused, mixed with white, and obscured by the dark irroration; dorsum below vein 1b distinctly paler. Hind wing paler golden-ochreous, becoming brighter towards the edge; cilia pale whitish-ochreous, hardly barred with pale tawny, somewhat more distinctly so opposite the apex.

Ovipositor elongate. Ostium simple, small. Genital ventrite haired, upper edge emarginate. Ductus bursae and bursa copulatrix simple. (Slide no. 898 D, allotype.)

Lake Habbema, 2600—2800 m, end July—end August, 1938 (holotype, male, allotype, female). Two males, one female.

Phthoncrodes MEYRICK, 1890 (fig. 680)

Phthonerodes MEYRICK, 1890, Trans. Roy. Soc. S. Austral., vol. 13, pp. 44—45.
FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 175, 1929.

As to the synonymy of this genus, we may refer to what is said above with regard to the genus *Xylorycta*.

Key to the Papuan species of *Phthonerodes*

1. Hind wing with veins 3 and 4 stalked. *cryptoleuca* spec. nov.
Hind wing with veins 3 and 4 connate 2
2. Fore wing with dorsal half and margins suffused with grey; spot on base of costa ill-defined *aristaepennis* spec. nov.
Fore wing silvery-white, not suffused with grey; a jet-black spot on base of costa *anthracopsara* spec. nov.

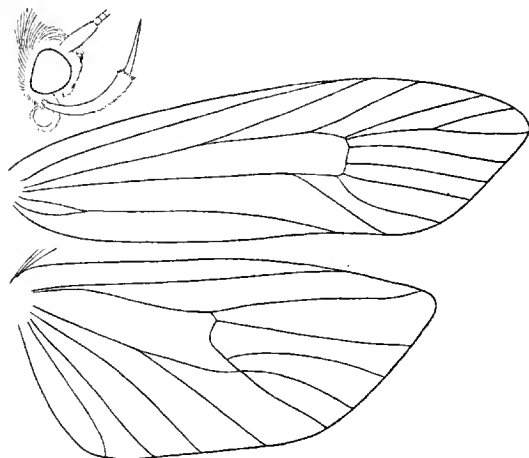


Fig. 680: *Phthonerodes aristaepennis* spec. nov., female, head and wing neuration.

***Phthonerodes anthracopsara* spec. nov. (fig. 645)**

ἄνθραξ = charcoal, ψαρός = sprinkled

♂ 26 mm. Head white, slightly suffused with grey medianly, lower half of the face blackish. Antenna dark grey, irrorated with white, scape white. Palpus white, basal segment grey, except the lower and the apical edges, basal half of the median segment, black, tip of the terminal, greyish. Thorax black, mixed with white, with two ill-defined whitish transverse fasciae, collar white. Abdomen white, with broad bands of minute golden-brassy setae. Legs white, anterior suffused with black above, median tibia with two black spots, median tarsus blackish-ringed. Fore wing elongate, rather narrow, pointed, costa curved towards the extremities, more so anteriorly, straight in the middle, apex rather pointed, termen gently sinuate, considerably oblique. Glossy white, markings black. Base of the costa with an oblique erect-triangular patch, reaching to the fold and occupying the upper half of the base of the wing, its anterior edge below the middle, notched; this patch extending as a narrow streak along the basal $\frac{1}{5}$ of the costa, and as a shorter and broader streak of coarse irroration along the base of vein 12, continued below the costa to beyond the middle of the wing by several sparse scattered large black scales; top reaching to the basal patch and connected by a strongly angulated transverse streak of black irroration with $\frac{2}{5}$ of the dorsum, angulation acutely produced posteriorly below the fold; four irregular discal spots in two outwardly oblique series; first pair, in the cell before the middle, and in the fold beyond the middle, respectively, more or less connected with each other and with dorsum beyond the middle by a black irroration, and by a fuscous suffusion; second pair, slightly less oblique, in the middle of the wing and on the dorsum before the tornus, respectively, separate; a large rhomboidal spot on $\frac{3}{4}$ of the costa, with its lower angle extended

as a slender, outwardly convex striga along the closing vein, its posterior angle with a blunt projection below the costa, followed by two small dots, ultimate dot on the costa before the apex; a series of some five moderate marginal dots from the apex to the tornus, erect, irregular, second dot (subapical) large, angularly projecting basad; a patch of scattered fuscous scales between the lower half of the closing vein and the termen; some fuscous suffusion along the dorsum. Cilia white, barred with blackish-fuscous, basal third of these bars black. Hind wing white tinged isabel, with bright silvery gloss, cilia white with an indication of a fuscous interrupted antemedian strigula.

Uncus robust. Guathos with narrow arms, and a narrow top. Valva narrow, curved; harpe, a strong, recurved subbasal tooth; sacculus with a strongly sclerotized upper surface. Vinculum moderate. Aedoeagus curved, of a moderate length. (Slide no. 1029 D, type.)

Moss Forest Camp, five km northeast of Lake Habbema, 2800 m, October 20, 1938. One specimen.

***Phthonerodes aristaepennis* spec. nov. (figs. 674, 675, 680)**

♀ 32 mm. Head and base of the antenna whitish, flagellum greyish. Palpus dark grey, basal segment, base of the median and the terminal segments, paler fuscous-grey. Thorax dark grey mixed with white (damaged). Abdomen pale greyish-ochreous, venter whitish-ochreous. Legs whitish-grey, posterior whitish. Fore wing elongate-subovate narrow, long, costa moderately curved, more so posteriorly, apex subobtuse, termen gently rounded, considerably oblique. Whitish, speckled and suffused with fuscous-greyish, and dark fuscous, markings blackish-fuscous. Costa narrowly irrorated with fuscous, costal edge and costal cilia posteriorly, white; a dark leaden-grey suffusion irrorated with fuscous, occupying the basal third of the wing and extended below the cell to $\frac{3}{4}$, on the costa angularly produced posteriorly and merging in the costal irroration; an ill-defined wedge-shaped streak of blackish-fuscous irroration from $\frac{1}{4}$ of the costa to above the middle of the dorsum, some whitish suffusion on the base of the costa; four cloudy greyish-fuscous blotches along the posterior third of the costa, interconnected and almost forming a single marginal patch, ending in the apex; a somewhat paler greyish transverse subterminal band, and a terminal suffusion originating from the preceding markings and converging in the tornus; a round blackish dot on each angle of the cell, in right wing interconnected and continued as a blackish streak to $\frac{2}{3}$ of the costa; a white dot on the end of the fold, followed by a small spot of a black irroration; posterior $\frac{2}{3}$ of the wing strongly speckled with blackish-fuscous. Cilia whitish, tips suffused with grey, basal half black, with white bars except in the apex. Hind wing pale ochreous-greyish, a broad ill-defined marginal grey shade; cilia white, an interrupted blackish antemedian line.

Ovipositor rather small, moderately constricted in the middle. Ostium narrow; limen, a small transverse plate, emarginate in the middle above. Two transverse ovate haired plates above the ostium, two smaller oblique plates below this. Ducuts bursae with a slender tubular colliculum, constricted above its lower extremity, membranous beyond the colliculum, and spiraled above the bursa copulatrix which is simple. (Slide no. 899 D, type.)

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938. One specimen.

***Phthonerodes cryptoleuca* spec. nov. (fig. 643)**

κρυπτός = concealed, *λευκός* = white

♀ 21 mm. Head, thorax sordid fuscous-white. Antenna white, towards apex becoming dark grey, white-ringed. Palpus whitish, median segment suffused with dark grey from beyond the base to below the apex, apex pure white; terminal segment fuscous. Abdomen greyish, tergites with broad transverse bands of coppery-orange bristles, showing through scales, posterior edges of the segments broadly white. Legs sordid white, anterior leg blackish above. Fore wing broad-lanceolate, costa curved, less so in the middle, apex rather long, pointed, termen hardly sinuate, considerably oblique. Glossy white, suffused with pale leaden-grey except in the median third of the disc, where a longitudinal pure white patch extends from $\frac{2}{5}$ to before the apex, and is moderately dilated at $\frac{3}{4}$ of the wing length; base of the costal edge, black; a blackish ill-defined suffusion on the base of the wing, extending as an attenuated marginal streak, becoming an irrorated line posteriorly, reaching to about the middle of the dorsum; a moderate elongate patch of black irroration above the fold slightly beyond its middle, and a few scattered black scales in the middle of the disc above this; pale leaden-grey marginal suffusion becoming rather dark grey on the apical third of the wing; still darker grey patches of ill-defined suffusion along fifth sixth of the costa and in the apex; a subtriangular elongate spot of a sparse black irroration in the upper half of the disc below the above mentioned grey costal suffused spot; a few black scales scattered over the wing. Cilia white, a suffused light grey patch opposite the apex, preceded by two broad ill-defined bars of the same colour on the costa. Hind wing glossy ochreous-white, cilia snow-white.

Seventh sternite sclerotized, forming a broad transverse plate, hairy above, with a membranous weak rhomboidal sclerite in the middle. Colliculum, a curved, rather long tube, its upper ventral rim strong, forming an obtuse projection, being the limen proper. (Slide no. 1122 D, type.)

Lower Mist Camp, 1400—1600 m, January 8, 1939. One specimen. Allied with *P. aristaepennis* spec. nov., but much smaller.

STENOMIDAE

The view, adhered to by several authors, that the present group represents a subfamily of the Xyloryctidae appears to be erroneous. The male genital characters, in the first place, show considerable differences between these groups, which are especially obvious in the representatives of the Papuan fauna.

Another point of difference between the Stenomidae and the Xyloryctidae is the entire absence of setae on the abdominal tergites in the former family, the presence of which is such a persisting characteristic in all the Indo-Malayan and the Papuan genera of the Xyloryctidae known to us.

In our opinion the Stenomidae doubtlessly represent an independent group, natural and characteristic, comprising species of a moderate size, with a typical neuration of the hind wing, with vein 8 almost always sinuate, and with the upper edge of the cell curved upwards and approximated towards, or connected with, 8 before the angle; veins 6 and 7 are usually stalked; the scape of the antenna is always devoid of a pecten. In some of the Papuan species recorded below the under side of both the fore and the hind wing is covered with sparse fine hairs.

Judging from the large number of closely related species in certain genera, e.g., in *Stenoma*, the family seems to be a relatively recent one, and the considerable specialisation of the male genitalia affirms this to some extent. It is very numerous in the New World, but is only scantily represented in the southern Asia.

Most of the genera are separated on account of but slight differences of external structures, and are difficult of recognition. A thorough revision of the family based on the study of genital characters is urgently needed. The knowledge of these characters is very elementary at present, and their study will, without doubt, provide convincing data for proper separation of the genera. It will reveal, we are sure, that certain large genera—e.g., *Stenoma* counts over 700 species in the New World alone—consist of several groups, each deserving a generic rank.

The Stenomidae of the New World are listed by BUSCK in the *Lepidopterorum Catalogus* (part 67, 1935), but representatives of other countries are excluded from that list, without any mentioning of this fact by that author.

The male genitalia of the Papuan species possess a very short tegumen with a broad base and a moderate uncus ending in a slender hook. The socii are absent. The gnathos forms a pending long hook. The basal parts of the valvae together with the vinculum form a large and robust ring, while the disc of the valva is reduced to relatively small appendages at the base of the tegumen, sometimes intricately folded and bristled. The costa is often armed with long crochets. The furca is shaped like a flattened rising

blade at each side of aedoeagus, which is tubular, broad, and sometimes very short. Cornuti are represented by a denticulate or serrulate sclerite.

The female genitalia resemble those in certain Oecophoridae. The ovipositor is very large, not extensible, almost tortricoid, with erect-ovate lobes; inside these lobes there is another pair of lobes, which are denticulate or sometimes covered with strong crochet-like teeth. The ostium is broad, the limen shaped as a broad, sculptured band. The ductus bursae is simple, spiraled. The bursa copulatrix is pear-shaped. The signum forms a small denticulate plate.

Key to the Papuan genera of the Stenomidae

1. Fore wing with veins 9 and 10 stalked *Sphalerostola* MEYRICK
Fore wing with veins 9 and 10 separate 2
2. Anterior tarsus not longer than tibia, thickened with roughish scales 3
Anterior tarsus normal: distinctly longer than tibia, not thickened with scales
. *Agriophara* ROSENSTOCK
3. Fore wing with veins 2 and 3 stalked *Procedes* gen. nov.
Fore wing with veins 2 and 3 separate 4
4. Male genitalia of a Xyloryctid type: valva simple, furca strong with dilated arms, aedoeagus normal *Neospastis* MEYRICK (India)
Male genitalia of an *Agriophara* type: valva modified, with cucullus separate, often digitiform, furca forming two moderate or short flattened plates, aedoeagus broad and short 5
5. Fore wing with veins 7 and 8 stalked *Nothochalara* gen. nov.
Fore wing with veins 7 and 8 separate *Synchalara* MEYRICK

Nothochalara gen. nov. (fig. 681)

$\nu\theta\acute{o}\varsigma$ = false, $\chi\alpha\lambda\alpha\rho\acute{o}\varsigma$ = weak

Head with loosely appressed scales, side tufts roughly spreading, face smooth. Ocellus small, inferior. Proboscis developed. Antenna in the female minutely ciliated, scape rather short, somewhat flattened, without a pecten. Labial palpus moderately long, recurved, ascending, median segment just reaching the base of the antenna, thickened with scales, roughish below, terminal segment under 1, scaled, pointed. Maxillary palpus vestigial. Thorax without a crest. Anterior tarsus as long as the tibia, somewhat thickened with scales. Posterior tibia closed with long fine appressed hairs. Fore wing with a few slightly raised scale-tufts, subovate, obtusely pointed; 1b furcate at base, 2 from towards angle, approximated to 3, 4 considerably distant from 3, approximated to 5, 7 and 8 stalked, 7 to just below the apex, 11 from slightly beyond the middle. Hind wing broadly semiovate, $1\frac{1}{2}$, cilia $\frac{1}{5}$, termen gently concave below the apex; 2 from $\frac{2}{3}$, 3 and 4 very closely approximated at the base, 5 closely approximated, 6 and 7 stalked. 8 slightly sinuate, upper

edge of the cell curved upwards, and approximated to 8 before the angle.

Genotype *Nothochalara sordida* spec. nov., female.

Nearest to *Synchalara* MEYRICK, differing by the stalked veins 7 and 8 in the fore wing and by the approximated veins 3 and 4 in the hind wing.

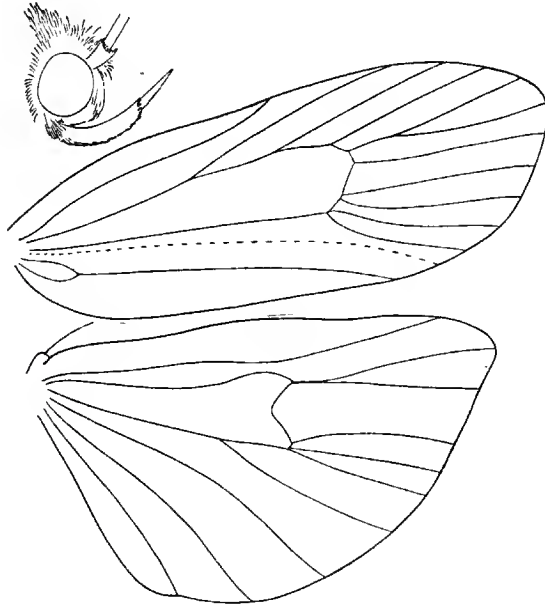


Fig. 681: *Nothochalara sordida* gen. nov., spec. nov., female, head and wing neuration.

***Nothochalara sordida* spec. nov. (figs. 681, 689, 690)**

♀ 21 mm. Head white. Palpus sordid whitish, median segment mixed with greyish-fuscous. Thorax and antenna creamy. Abdomen and legs pale ochreous-whitish. Fore wing elongate-ovate, rather narrow, little dilated, broadest at $\frac{3}{4}$, costa curved towards the extremities, straight in the middle, apex obtuse, termen rounded, considerably oblique. Whitish. Costal fourth from the base to before the apex irregularly suffused with light tawny-fulvous, a ferruginous suffused oblique spot on the base of the costa; an irregular broad curved streak of a blackish-fuscous irroration mixed with ferruginous, running obliquely from below $\frac{1}{4}$ of the costa to the cell, along the posterior $\frac{2}{3}$ of the latter, then curved upward, running along the posterior $\frac{1}{5}$ of the costa; a faint curved submarginal row of ferruginous suffused dots from below $\frac{4}{5}$ of the costa, traversing the preceding streak, thence running before the termen and parallel to it, to the tornus; a faint streak of fulvous suffusion along the fold posteriorly, mixed with a few brownish scales, and an ill-defined patch of a similar suffusion on the basal fourth of the dorsum; a narrow ferruginous marginal line, interrupted so as to form two small streaks on the costa before the apex, thence continuous from the apex to the tornus. Cilia whitish, apical

half mixed with pale brownish-grey, basal half with a row of ferruginous bars not reaching base. Hind wing ochreous-whitish, glossy, towards the apex tinged pale tawny, a narrow suffused grey marginal line, forming small dots on the veins; cilia whitish, with a greyish basal shade.

Ovipositor large, interior lobes short-haired. Limen, a strong curved transverse band, in the middle of which opens the narrow ostium. Ductus bursae broad along its basal fourth, abruptly narrowed and irregularly coiled below. Bursa copulatrix small. Signum small, a weak round plate with one minute dentation in its middle. (Slide no. 900 D, type.)

Araucaria Camp, 800 m, March 18, 1939. One, rather damaged, specimen.

Proscedes gen. nov. (fig. 682)

προσκηδής = allied

Head with loosely appressed scales, side tufts roughly spreading. Ocellus small, inferior. Proboscis developed, scaled towards the base. Antenna in the male slightly thickened, long-ciliate, ciliations 2, in the female minutely ciliate, scape thickened with appressed scales, rather short, without a pecten. Labial palpus long, recurved, ascending, median segment reaching beyond the base of the antenna, thickened with scales,

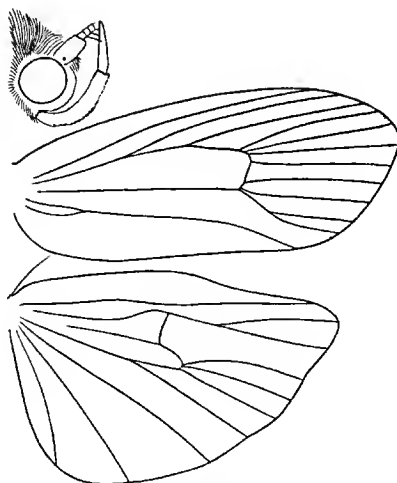


Fig. 682: *Proscedes torquigera* gen. nov., spec. nov., male, head and wing neuration.

roughish beneath, lower edge flattened dorso-ventrally, terminal segment over $\frac{1}{2}$, thickened, pointed. Maxillary palpus small, slender, appressed. Thorax with short lateral crests. Anterior tarsus as long as the tibia, thickened with appressed scales, roughish at the apex. Posterior tibia densely long-haired above and beneath. Fore wing with small raised scale-tufts, elongate-ovate, apex and termen rounded; 1b furcate at the base, 2 and 3 stalked from the angle, 4 closely approximated, 7 separate,

to the termen, 11 from just beyond the middle. Hind wing with 2 from about $\frac{3}{4}$, 3 and 4 separate, approximated at the base, 5 approximated, 6 and 7 stalked, 8 slightly sinuate, upper edge of the cell curved upward and approximated to 8 before the angle. Male genitalia of the *Agriophara* type, with costa unarmed.

Genotype *Proscedes torquigera* spec. nov., male.

Nearest to *Synchalara* MEYRICK, differing by the stalked veins 2 and 3 in the fore wing, and by the much higher specialized male genitalia.

***Proscedes torquigera* spec. nov. (figs. 682, 688)**

♂ 23—24.5 mm. Head and thorax white mixed with pale greyish-fuscous. Antenna dark grey, towards the base above, white. Palpus white, mixed with pale greyish-fuscous, basal half of the median segment except its lower edge, and a narrow basal ring of the terminal segment, blackish. Abdomen ochreous-whitish, anal tuft pale golden-ochreous. Legs whitish; anterior leg blackish medianly, with tarsus black with two white rings; median leg, tibia with the knee and a subapical spot, blackish, tarsus with the basal segment black, other segments with black rings; posterior leg creamy, tarsus ringed with pale fuscous. Fore wing elongate-ovate, rather broad, dilated, with costa concave at extreme base, curved beyond this, somewhat prominent at $\frac{3}{4}$, apex rounded, termen rounded, moderately oblique. White, rather irregularly finely irrorated with dark fuscous, markings dark fuscous, partially slightly suffused with pale tawny-ochreous. A suffused spot on the base of the costa and an oblique transverse mark in the upper half of the disc beyond the base; a minute dot above $\frac{1}{3}$ of the dorsum; an interrupted transverse fascia from before $\frac{1}{4}$ of the costa to beyond the middle of the dorsum, formed by a large oblique transverse dot on the costa, by a suffused transverse streak in the disc, and by a prostrate-V-shaped mark between the fold and the dorsum, with point directed basad; discal part of the fascia with its anterior edge serrate, preceded by a ridge of raised white scales, its posterior edge indefinite, continued by a pale light fuscous, and by a pale ochreous-tawny irroration in the cell, extending to well before the closing vein; another interrupted transverse fascia from before the middle of the costa to the tornus, formed by a large rounded dark fuscous dot on the costa before the middle, more or less connected with two small irregular longitudinal dashes between the bases of the veins 11, 10 and 9; a blackish-fulvous, curved, raised mark along the closing vein, almost connected below with a small triangular dark fuscous patch from the lower angle of the cell, reaching $\frac{2}{3}$ towards the edge of the wing and bordered by veins 2+3 and vein 5; a small longitudinal patch of pale ochreous-tawny irroration mixed with fuscous, just beyond the closing vein; four dark fuscous longitudinal marks along the posterior half of the costa: first dot linear, confluent with the submedian dot, other dots becoming round

towards the apex, last one subapical; these four marks interconnected by a minute sinuate marginal line; a strongly curved fascia from towards the end of the first mark to the tornus, narrow and interrupted below the costa, formed by seven wedge-shaped well-defined interneural dots opposite the apex and the termen, with their tops pointing distad; third of these dots much smaller, fourth to sixth almost subovate, last remote, vertical; small triangular dots of dark fuscous irroration on the terminations of the veins in the apex and along the termen, more or less interconnected by a minute marginal line. Cilia white, with a dark fuscous interrupted antemedian fascia, between the interruption the base of the cilia tinged pale ochreous. Hind wing pale fuscous-isabel, less pale towards the apex. Cilia white, basal third pale fuscous-isabel.

Uncus, a slender, long, little curved projection. Gnathos pending, with sinuate arms, forming a U-shaped basal portion, and a long slender, little curved hook. Valva intricately shaped, divided in a bowed narrow basal half and a plicate and bristled apical half, ending in a slender pointed cucullus. Transtilla moderately broad, V-shaped. Vinculum much flattened. Furca, two strong triangular sclerites. Aedoeagus extremely short, tubular; cornuti, two serrate plates. (Slide no. 904 D, holotype.)

Rattan Camp, 1200 m, February 22, 1939 (holotype, male). Araucaria Camp, 800 m, March 4, 1939. Two specimens.

Agriophara ROSENSTOCK, 1885 (figs. 683, 684)

Agriophara ROSENSTOCK, 1885, Ann. Mag. Nat. Hist., series 5, vol. 16, p. 439. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 9, 1929. *Nec Agriophara* MEYRICK, 1913, Trans. Ent. Soc. Lond., 1913, p. 182. BUSCK, Lepid. Catal., part 67, p. 8, 1934 (synonym of *Chlamydastis* MEYRICK, 1916).

According to BUSCK (*Lepid. Catal.* part 67, p. 8, 1935) the American group of species attributed by MEYRICK to this genus belongs to *Chlamydastis* MEYRICK (*Exot. Micr.*, vol. 1, p. 481, 1916) of which *Agriophara* MEYRICK *nec* ROSENSTOCK (*Trans. Ent. Soc. Lond.*, 1913, p. 182) and *Ptilogenes* MEYRICK, 1917 are the synonyms. This limits the region of the true *Agriophara* species to Australia and New Guinea.

We owe to the kindness of Mr. BRADLEY a photograph (fig. 684) of the male genitalia (mounted by Mr. CLARKE) and sketches of the head and of the wing neuration (fig. 683) of the genotype, *Agriophara cinerosa* ROSENSTOCK, 1885, from Australia. These show that the following five species belong to the present genus. In all of them the anterior tarsus is longer than the tibia, and not dilated. The veins 3 and 4 in the hind wing are connate or short-stalked, according to the original description, but these veins may also be distinctly separate in closely related species.

Our scanty material, completed by two more species from other collections, may be divided in three groups. 1) *cinerosa* type: greyish, fore

wing subovate; uncus developed, costa of the valva armed with one or more long crochets. 2) *muscolor* type: greenish with dark fuscous markings, fore wing subtruncate; uncus developed, costa armed as in the preceding group. 3) *nephelopa* type: greyish with fuscous markings, fore wing subovate; uncus strongly reduced, costa unarmed.

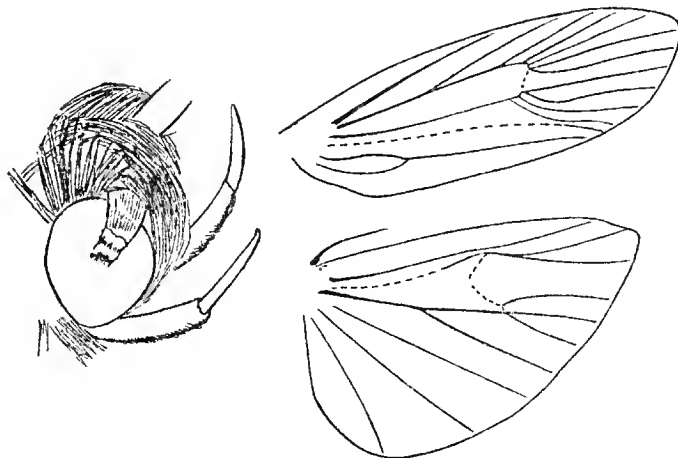


Fig. 683: *Agriophara cinerosa* ROSENSTOCK, head and wing neuration of the type specimen in the British Museum (J. D. BRADLEY delin. By courtesy of the Trustees of the British Museum, Natural History).



Fig. 684: *Agriophara cinerosa* ROSENSTOCK, genitalia of the type specimen in the British Museum (♂, No. B.M. 1699, by courtesy of the Trustees of the British Museum, Natural History, phot. no. 1699).

We are in doubt whether this third group might represent a separate genus. However, the only species at hand does not show any external differences with *Agriophara*, while the genitalia are of the same type except for the reduced uncus. Therefore we prefer to include *nephelopa* in the present genus, pending further evidence.

With kind permission of the Trustees of the British Museum (Natural History), we publish here the above mentioned photograph and Mr. BRADLEY'S sketches of *Agriophara cinerosa* ROSENSTOCK of the type specimen. ROSENSTOCK records veins 3 and 4 in the fore wing as being long-stalked which is not the case.

The genitalia may be described as follows. Uncus and gnathos well-developed. Valva with moderate but distinct sacculus and rather well-defined cucullus; costa with a basal projection armed with some seven long crochets. Transtilla slender. Furca, two small rising blades. (Slide no. B.M. 1699.)

Five species of *Agriophara* have been described from New Guinea. We place *A. parilis* MEYRICK, 1918, *A. neoxantha* MEYRICK, 1915, *A. asaphes* DIAKONOFF, 1948, and, tentatively, *A. lysimacha* MEYRICK, 1915, in the *cinerosa* group, to which also belongs *A. biornatu* spec. nov. *A. parallela* spec. nov. (and two more undescribed species in our possession, from other collections) belong to the distinct *muscolor* group. Also *malacobryas* MEYRICK, 1938, described as a *Synchalara*, very probably belongs to the latter group.

Key to the Papuan species of *Agriophara*

1. Greenish, markings brown or fuscous 2
 Pale whitish-ochreous or greyish-white 4
2. A large transverse erect-triangular patch beyond $\frac{3}{4}$, becoming paler below but traceable across $\frac{4}{5}$ of wing *virescens* spec. nov.
 No such patch; sometimes a costal spot at $\frac{3}{4}$, reaching not farther than across upper third of wing. 3
3. Two narrow partially interrupted transverse fasciae, beyond base and at $\frac{1}{3}$, respectively, and an oblique discal mark at $\frac{3}{4}$ *parallela* spec. nov.
 One broad transverse fascia at $\frac{1}{3}$; a moderate costal patch at $\frac{3}{4}$
 *muscolor* MEYRICK
4. Pale whitish-ochreous; plical and second discal stigma black, the first connected with $\frac{1}{5}$ of costa; a blackish dot on middle of costa, connected by a strongly curved line with $\frac{3}{5}$ of dorsum, a fine interrupted submarginal line
 *lysimacha* MEYRICK
 White or greyish-white 5
5. An elongate dark fuscous patch in disc at $\frac{3}{4}$, enclosing a white dot in upper angle of cell *nephelopa* spec. nov.
 Not thus 6
6. Three oblique interrupted grey fasciae, from base, from one fourth, and from middle of costa, respectively, a strongly curved submarginal line from $\frac{4}{5}$ of costa to dorsum before tornus 7
 An oblique short black streak on base of costa, a grey subterminal angulate

- transverse fasciae from $\frac{4}{5}$, and a suffused greyish fascia from upper angle of cell to $\frac{2}{3}$ of dorsum *asaphes* DIAKONOFF
7. Distinctly tinged light fuscous; markings dark fuscous *heterochroma* spec. nov.
Pale grey, markings dark grey 8
8. Antennal ciliations in male 6 *neozantha* MEYRICK
Antennal ciliations in male 4 or less 9
9. Antennal ciliations in male 4; genitalia with valva reduced to a narrow blade *biornata* spec. nov.
Antennal ciliations 3-- $2\frac{1}{2}$; genitalia with valva normal 10
10. Antennal ciliations in male 3. Genitalia with appendix at base of valva gradually narrowed, not hooked *parilis* MEYRICK
Antennal ciliations in male $2\frac{1}{2}$. Genitalia with the appendix at base of valva hooked, acutely pointed *bradleyi* spec. nov.

Agriophara parallela spec. nov. (figs. 692, 693)

παράλληλος = parallel

♀ 24 mm. Head and thorax pale green. Antennae fuscous, ringed with pale ochreous, scape pale green. Palpus greenish-white, speckled with dark fuscous, basal half of the median segment, base and tip of the terminal segment, dark fuscous. Abdomen whitish. Legs pale ochreous, anterior suffused with dark fuscous above except on articulations, median infuscated above except the apex of the tibia, and the apical half of the tarsus; tibia expanded with whorls of rough scales, two median transverse dark fuscous bands; posterior leg, tibia with a greyish base, and with a lateral streak of dark fuscous irroration, first segment of the tarsus irrorated with dark fuscous except towards the apex. Fore wing subovate, moderately broad, little dilated, costa curved anteriorly, less so posteriorly, straight in the middle, apex obtuse, termen slightly rounded, faintly concave below the apex, almost vertical. Pale whitish-green, evenly suffused with light green, markings dark ferruginous-brown. A triangular dot on the base of the costa, a short submarginal streak on the dorsum from well beyond the base and a small longitudinal mark on the dorsal edge before $\frac{1}{4}$; two outwardly oblique rather narrow transverse streaks of dark ferruginous-brown irroration from the costa beyond the preceding mark, and from $\frac{1}{4}$, respectively, slightly converging, reaching below the fold, moderately and triangularly dilated on the costa, almost interrupted on vein 12 and in the fold, edged anteriorly by slightly raised scales; an indication of a third streak parallel to the second, formed by an elongate-triangular spot on the middle of the costa, some dark scales in the disc, a small irrorated dot above the fold before the lower angle of the cell, and a small narrow vertical mark on the dorsum before the tornus; a streak of sparse fine irroration along the central third of the dorsum, with its extremities triangularly dilated, anterior triangle largest, reaching half-way towards the fold; posterior part of the costa with four somewhat elongate dots, becoming narrower towards the apex, first dot beyond $\frac{3}{5}$,

last one subapical; an outwardly oblique strong wedge-shaped mark in the disc beyond the cell, its acute upper extremity traversing the upper angle of the cell, lower extremity of the mark rounded; a narrow straight streak well before and parallel to the termen, from vein 7 to 4. Cilia pale whitish-green, a suffused broad light green median shade. Hind wing pale greyish, glossy, faintly clouded darker along the fold, towards the dorsum and in the apex. Cilia whitish, an interrupted dark grey antemedian shade.

Ovipositor moderate. Seventh sternite strong, dilated, sparsely bristled above. Ostium broad, funnel-shaped. Ductus bursae broad above, simple; bursa simple. (Slide no. 901 D, type.)

Lower Mist Camp, 1400—1600 m, January 31, 1939. One specimen. Allied to *A. muscicolor* MEYRICK.

Agriophara virescens spec. nov. (fig. 695)

♂ 21 mm. Head, thorax whitish. Antenna with a whitish scape, flagellum fuscous-grey, suffused with white towards the apex above, ciliations $1\frac{1}{2}$. Palpus pale green, median segment with a whitish apex, basal $\frac{2}{3}$, and the lower edge to below the apex, dark ferruginous-brown, terminal segment with a whitish apex, a basal, and a subapical ferruginous-brown rings. Abdomen sordid whitish. Legs white, irrorated with dark brown except broad rings around apices of the tibiae and of the tarsal segments; posterior leg slightly irrorated. Fore wing moderately broad, elongate, ovate-truncate. Pale green, markings dark brown. A subrectangular, elongate spot on the costa, occupying less than its basal fifth, connected along the costa by a moderate streak of a brown irroration with a subtriangular somewhat smaller spot on the middle of the costa (possibly extending as a transverse vertical streak to the lower edge of the cell); a broad vertical transverse wedge-shaped patch from before $\frac{2}{3}$ of the costa to well before the apex, reaching $\frac{4}{5}$ across the wing, narrowed and becoming ill-defined below; anterior edge rather straight, with a small projection below the costa, posterior edge inwardly oblique above, with a rounded projection in the middle of the disc; a streak from above the middle, outwardly curved and parallel to that projection, running half-way between it and the termen, with dentations between the veins posteriorly; an irrorated spot on the costa just before the apex, and a terminal line with triangular dilatations on the veins. Cilia pale greyish-fuscous, basal half darker fuscous, with two paler, greenish bars: opposite the apex and below this; two faint postmedian fuscous lines. Hind wing fuscous-whitish, slightly clouded with fuscous in the apex, margin narrowly fuscous. Cilia pale greyish, a sordid whitish basal, and a faint antemedian, darker greyish band.

Uncus strong. Gnathos V-shaped, as long as the uncus. Valva with a long slender costal process, armed with a sickle-shaped but little curved,

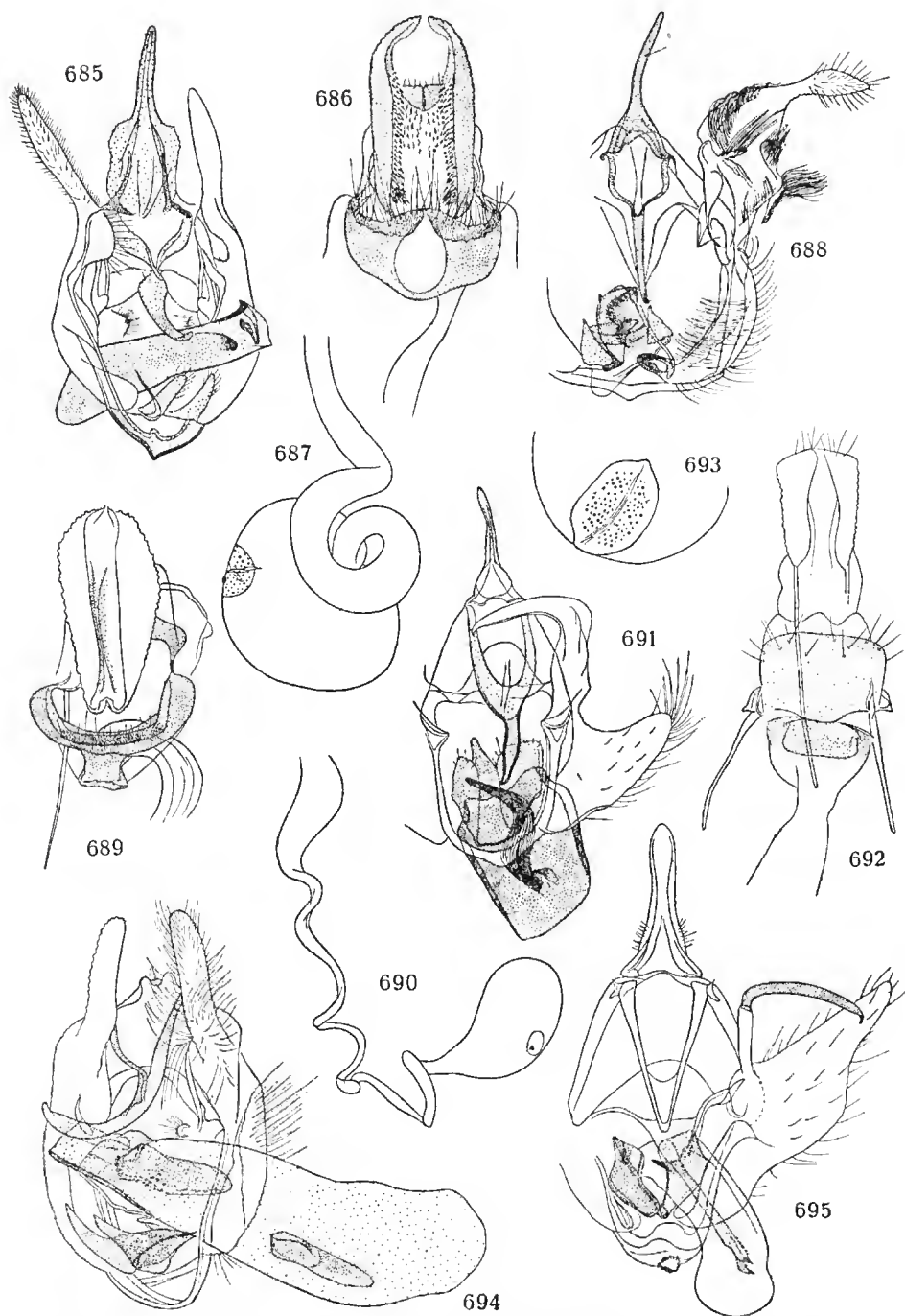
flattened crochet; cucullus abruptly narrowed at $\frac{2}{3}$ of the length of the valva, pointed; sacculus ill-defined. Transtilla strongly curved, U-shaped. Furca short, its arms broad, truncate, sparsely bristled. Aedoeagus moderate, broad, curved. Socius, a long sclerotized rod, with one extremity pointed, another with two teeth and a row of serrulations. (Slide no. 946 D, type.)

Cyclops Mountains, 400—900 m, end July, 1938 (J. OLTHOF). One specimen, with the dorsal half of the wing rubbed off, but sufficiently characterised by the costal markings and by the genitalia. Belongs to the *muscolor* group. In *muscolor* the costal process is shorter, while the crochet is much longer, gradually curved, almost semicircular.

***Agriophara heterochroma* spec. nov. (fig. 696)**

ἄτερος = other, *χρῶμα* = colour

♀ 25 mm. Head pale fuscous mixed with darker fuscous, face whitish. Antenna pale fuscous, ringed with darker fuscous. Palpus whitish, irrorated with tawny-fuscous, median segment with basal $\frac{2}{3}$, terminal with basal third, suffused with dark fuscous. Thorax pale fuscous mixed with darker fuscous, tegula, except towards the apex coarsely, mixed with fuscous-tawny. Abdomen whitish-fuscous, indistinctly banded with grey. Legs ochreous white, dark fuscous, ringed with whitish above, posterior tibia slightly suffused with grey above, posterior tarsus grey, white-banded, below tinged golden. Fore wing elongate-subovate, moderately dilated, costa curved, apex obtuse, termen hardly rounded, oblique. Creamy, densely irrorated with pale fuscous, markings formed by pale tawny, brownish, and dark fuscous-brown irroration. Anterior half of the costa narrowly mixed with fuscous; a moderate spot on the costa just beyond the base, edged anteriorly with dark fuscous-brown, with two small appendages below reaching to fold, dark fuscous-brown; an oblique interrupted transverse dark fuscous-brown streak from $\frac{1}{5}$ of the costa, running to below the middle of the fold, formed by a small costal spot, by two dots below this, by a moderate streak across the cell, not reaching the fold, and by a smaller streak below the fold, these streaks slightly raised; an erect-triangular pale fuscous-tawny discal patch adjacent to the lower two-thirds of the preceding streak, top directed apicad and reaching along the lower edge of the cell to before the middle of the wing; below this top the patch with a deep, triangular incision posteriorly; a transverse, erect-ovate patch of rather sparse dark fuscous-brownish irroration on $\frac{2}{3}$ of the dorsum, above not reaching the cell, in the left wing dissolved in three ill-defined dark spots; indication of a strongly outwards-oblique, dark fuscous-brown fascia, running beyond $\frac{2}{5}$ of the costa to the end of the cell, formed by a wedge-shaped mark on the costa; some two dots along upper edge of the cell beyond this fascia, a raised ridge along the upper



Genitalia of Stenomidae. Fig. 685: *Agriophara biornata* spec. nov., male. Fig. 686: *A. nephelopa* spec. nov., female. Fig. 687: *idem*, ductus bursae and bursa copulatrix. Fig. 688: *Procedes torquigera* spec. nov., male. Fig. 689: *Notochalara sordida* spec. nov., female. Fig. 690: *idem*, ductus bursae and bursa copulatrix. Fig. 691: *Agriophara bradleyi* spec. nov., male. Fig. 692: *A. parallela* spec. nov., female. Fig. 693: *idem*, part of bursa copulatrix with signum. Fig. 694: *A. nephelopa* spec. nov., male. Fig. 695: *A. virescens* spec. nov., male.

part of the closing vein, and a dot on the lower angle of the cell; a patch of light tawny irroration in the disc beyond the cell, posteriorly limited by a strongly outwards-curved series of irregular dark fuscous-brown dots from before $\frac{3}{5}$ of the costa to the dorsum before the tornus, forming a broad loop in the disc, more or less interconnected by a pale fuscous and tawny suffusion; terminal veins beyond these marks streaked with pale fuscous; four brownish dots along the posterior fourth of the costa, becoming paler towards the apex, ultimate dot apical; an irregular, interrupted dark fuscous terminal line; ill-defined dark irroration along the dorsal edge, somewhat dilated before the middle. Cilia creamy, rather irregular broad fuscous bars along their basal third, a greyish shade along their median third. Hind wing very pale fuscous, with a golden gloss. Cilia fuscous-whitish, with a golden gloss, a greyish subbasal shade.

Limen, a transverse sclerite with plicate sides, together with a well-developed colliculum forming a T-shaped body. Ovipositor without crochets. (Slide no. 1002 D, type.)

Iebèlè Camp, 2250 m, November 26, 1938. One specimen. Distinct by fuscous-tawny tinge of the markings.

Agriophara bradleyi spec. nov. (fig. 691)

♂ 17 mm. Head white. Antenna white, scape grey above, flagellum ringed with grey, ciliations $2\frac{1}{2}$. Palpus white, slightly mixed with greyish below, basal segment, basal half of the median segment, and a basal ring of the terminal, dark greyish-brown. Thorax white, irrorated with grey. Abdomen ochreous-whitish. Legs white, anterior suffused with grey, tibia and tarsus black, median tibia with a dark fuscous spot, tarsus dark fuscous, white-ringed. Fore wing rather broad, elongate-subovate, costa curved, apex very obtusely pointed, termen rounded, moderately oblique. White, slightly irrorated with fuscous-grey, markings irrorated fuscous-grey. Basal fourth of the costal edge narrowly grey; a small interrupted blackish oblique streak from the base of the costa, this base somewhat suffused with greyish; a subquadrate dot on $\frac{1}{3}$ of the costa, forming an oblique series with two irregular paler dots in the disc; second of these dots smaller, third in the middle of the cell, largest; a larger quadrate dot on the middle of the costa, continued by greyish suffusion along the upper edge of the cell to before its upper angle; four small dots along the costa from beyond the middle to before the apex; a streak, originating from the lower edge of the first of the preceding dots, interrupted on veins, running parallel to the costa and reaching to below the ultimate dot, thence curved, to above the tornus; a suffused small inwardly oblique streak along the lower half of the closing vein, connected with an irregular transverse patch of a cloudy irroration beyond the cell, reaching to the tornus; dark irroration forming a series of ill-defined dots along the fold

from beyond the base, first of these distinct, blackish; dorsum suffused with grey and denser irrorated with greyish-fuscous, this irroration tending to form outwardly oblique streaks; a triangular spot of a blackish suffusion above $\frac{1}{4}$ of the dorsum, with its top on the dorsal edge; a row of faint triangular greyish dots on the veins along the termen. Cilia whitish, with an interrupted fuscous-greyish median band, tornal cilia somewhat infuscated. Hind wing whitish-isabel-grey, paler and densely covered with fine hairs towards the base. Cilia white, basal half greyish-isabel.

Uncus moderate, slender. Gnathos almost twice as long, Y-shaped. Valva short, costa concave, at the base erected in a large process which is rectangularly bent in the middle, with a scaled and bristled acute point; cucullus obtuse; sacculus indefinite. Transtilla rather broad, with a projection in the middle below. Furca, two broad, rounded blades. Aedoeagus very broad and short, anterior edge of the orifice extended so as to form a strong point. Cornutus, a huge sinuate spike. (Slide no. 947 D, holotype.)

Mist Camp, 1800 m, January 14, 1939 (holotype). Araucaria Camp, 800 m, March 3, 1939. Two specimens. Very near to *A. parilis* MEYRICK, but with the genitalia specifically distinct: the appendix at the base of the valva is hooked and pointed, while in the latter species it is gradually narrowed.

Dedicated to Mr. J. D. BRADLEY, of the British Museum.

Agriophara biornata spec. nov. (fig. 685)

♂ 26 mm. Head and thorax whitish, slightly tinged pale ochreous. Antenna with ciliations under 2. Palpus rather long, median segment exceeding the base of the antenna, terminal segment about $1\frac{1}{2}$; whitish, lower edge slightly infuscated, terminal segment mixed with blackish-fuscous, especially towards the base. Abdomen ochreous-whitish. Legs whitish, anterior tibia infuscated below. Fore wing elongate-ovate, moderately dilated, costa moderately curved posteriorly, apex obtuse, termen rounded, oblique. Whitish, markings dark fuscous. Three small marks: on the costa, in the fold, and on the dorsum, indicating a transverse streak just beyond the base; a round suffused small spot on $\frac{1}{4}$ of the costa; another such spot, larger, elongate, slightly tinged fulvous, before the middle; it is hardly connected with a broad submedian transverse band of a sparse irroration, forming rather coarse blotches, more or less interconnected by finer network; an indication of an almost horizontal line from the lower edge of the submedian costal spot, running well beyond the cell, abruptly rectangularly bent at $\frac{1}{3}$ of the vein 8, and continued to the tornus as a curved row of interconnected coarse longitudinal interneural marks, two largest of these below veins 5 and 6, respectively; a second tolerably parallel transverse curved row of larger interneural blotches from below the costa before the apex, to above the

tornus; some fuscous speckling all over the wing. Cilia (imperfect) whitish, mixed with fuscous. Hind wing with veins 3 and 4 separate, 6 and 7 stalked; pale sordid whitish, tinged pale fuscous, rather glossy; cilia (imperfect), whitish, with a narrow antemedian grey line.

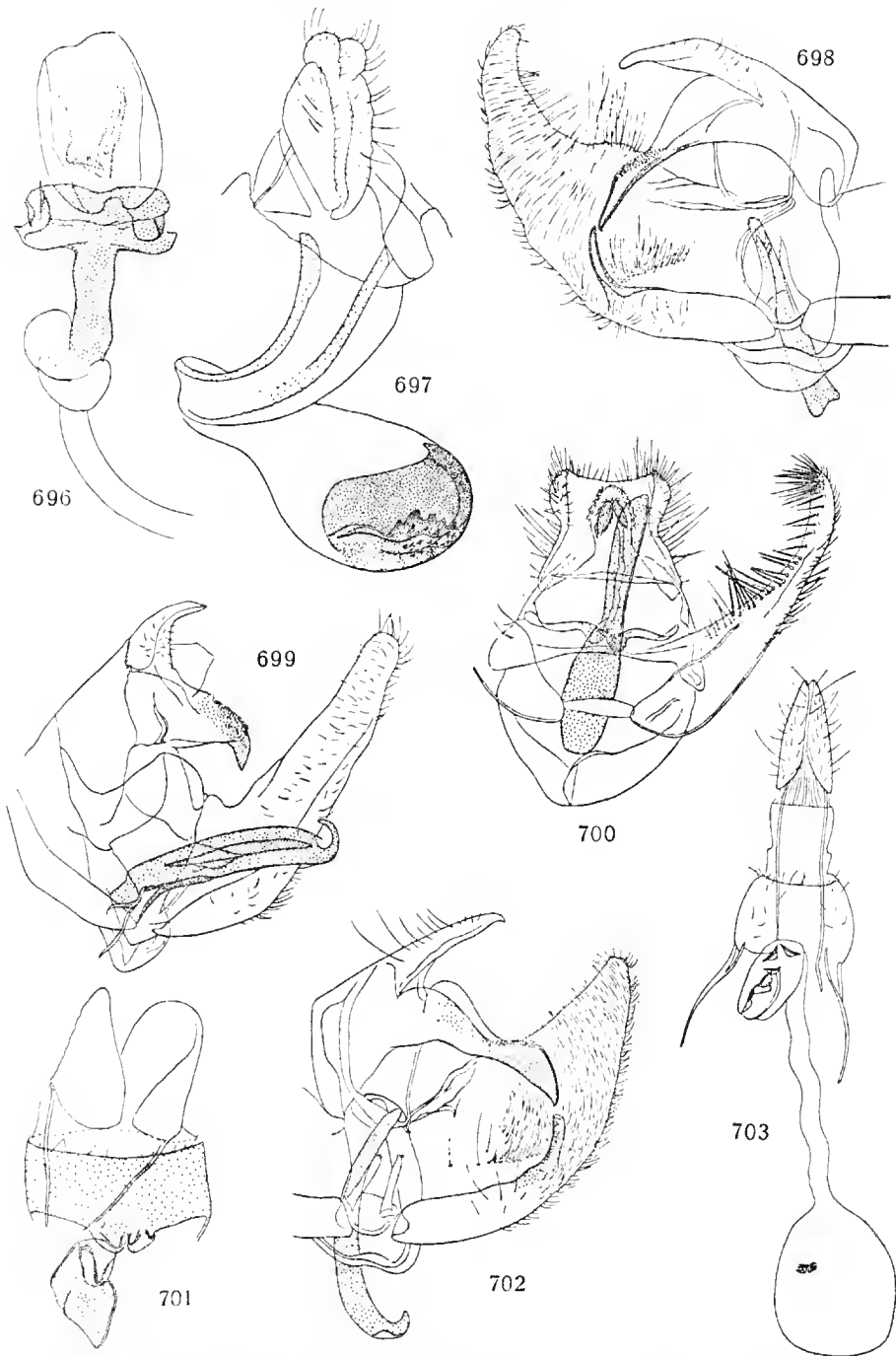
Uncus with a quadrate basal part, shoulders denticulate; apical part, a slender projection. Gnathos with broad, laterally flattened arms, and a narrowed and curved hook. Valva simple, a strong erect narrow basal part with, at its upper extremity, a slender valva proper; a haired small pad at each side opposite the middle of the base of the valva. Transtilla broad, constricted in the middle. Vinculum broad, short, top pointed. Furca, two haired projections. Aedoeagus moderate, tubular. Cornuti, a denticulate plate. (Slide no. 905 D, type.)

Iebèlè Camp, 2250 m, November 13, 1938. One, rather damaged specimen.

***Agriophara nephelopa* spec. nov. (figs. 686, 687, 694)**

νεφέλη = cloud, *ὄψ* = eye

♂ 27 mm, ♀ 25—30 mm. Head whitish, vertex sordid light ochreous. Antenna whitish, ringed light grey, posterior half dark fuscous, ciliation. in the male, 3. Palpus sordid pale ochreous, median segment infuscated along the half of the upper edge, more so in the male, terminal segment mixed with dark fuscous, in the male over $\frac{3}{4}$, in the female over $\frac{1}{2}$. Thorax whitish, anterior third suffused with dark fuscous, a broad transverse subapical dark fuscous band. Abdomen whitish-greyish with ochreous gloss, anal tuft in the male whitish. Legs tawny-fuscous, posterior leg whitish with tawny spurs and tarsus, anterior leg in the male suffused with blackish above. Fore wing elongate-subovate, broader and more dilated in the male; broadest at $\frac{3}{4}$, in the female at $\frac{2}{3}$, costa curved, apex obtuse, termen slightly rounded, moderately oblique. Sordid whitish, irregularly and coarsely irrorated with tawny and dark fuscous, markings dark fuscous, suffused. Basal patch rather large, its edge considerably outwards-oblique, with an excavation below the costa, on the dorsum reaching $\frac{2}{5}$; a subquadrate spot on $\frac{1}{4}$ of the costa and a large irregular, strongly suffused patch at $\frac{2}{5}$ of the disc below and beyond the preceding, reaching below the fold; a subquadrate dot on the middle of the costa, almost connected by an outwardly convex ill-defined and interrupted transverse band of a dark fuscous suffusion, with the dorsum beyond the middle, connected with discal patch by a dark fuscous suffusion along the fold, and by a tawny suffusion in the cell; an elongate longitudinal patch of a blackish-fuscous suffusion from before the upper angle of the cell, reaching halfway towards the apex, edged by veins 5—7, enclosing a round white dot on the upper angle of the cell, and obscured above and posteriorly by inwardly oblique, ill-defined, small marks of tawny and



Genitalia of Stenomidae and Oecophoridae. Fig. 696: *Agriophara heterochroma* spec. nov., female. Fig. 697: *Acriotes saprocarpodes*, spec. nov., female. Fig. 698: *Epicurica nebuligera* spec. nov., male. Fig. 699: *Chezala cathara* spec. nov., male. Fig. 700: *Hypercallia sarcodes* spec. nov., male. [Fig. 701: *Euzelotica acrosperma* spec. nov., female. Fig. 702: *Epicurica cinnamomea*, spec. nov., male. Fig. 703:

E. bilineata spec. nov., female.

dark fuscous suffusion, almost connecting the blackish patch with the costa before the apex; four suffused fuscous dots on the terminations of the veins along the posterior $\frac{2}{5}$ of the costa; a narrow, fuscous marginal streak in the apex, and along the termen, from beyond the ultimate costal dot, becoming blackish-fuscous in the tornus; a suffused outwardly convex subterminal band from the costa before the apex to above the tornus, tawny, becoming dark fuscous towards the costa, interrupted in the middle; all the above mentioned markings strongly suffused, and obscured by fuscous irroration, except the white discal ocellus, which is well-defined. Cilia sordid whitish, with broad blackish-fuscous bars, tips suffused with fuscous-grey towards the tornus. Hind wing with veins 3 and 4 connate 6 and 7 stalked; glossy pale whitish-fuscous, becoming paler towards tornus; cilia sordid whitish, with a broad dark greyish-fuscous median band.

Uncus reduced to a pair of short knobs. Gnathos very long, arms slender, hook curved. Valva with a strong, simple, erect basal part, valva proper moderate, cylindrical, top rounded. Transtilla moderate, curved upward, narrower along median third. Harpe, hairy small knobs. Vinculum rounded, short. Furca, two strong broad blades with pointed apices. Aedoeagus extremely large and broad, narrowed; cornuti, two more or less denticulate sclerites. (Slide no. 902 D, holotype.)

Ovipositor large, interior lobes and edge of the oviduct covered with crochet-like dentations. Limen, a broad transverse curved band with a round sclerite in the middle, with a wrinkled upper edge. Ductus bursae simple, coiled above bursa copulatrix, which is spheroid. Signum, a weak small round denticulate plate. (Slide no. 903 D, allotype.)

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938 (holotype, allotype). Top Camp, 2100 m, January 19, 1939. One male, two females. The specimen from the Top Camp has darker, blackish-fuscous, markings.

OECOPHORIDAE

Key to the Papuan genera of the Oecophoridae

- | | | |
|---|-----------------------------|---|
| 1. Fore wing with vein 10 absent | <i>Syscalma</i> MEYRICK | |
| Fore wing with vein 10 present | | 2 |
| 2. Fore wing with vein 7 absent | | 3 |
| Fore wing with vein 7 present | | 5 |
| 3. Hind wing with veins 3 and 4 distinctly separate . . . | <i>Acriotes</i> gen. nov. | |
| Hind wing with veins 3 and 4 connate | | 4 |
| 4. Antenna 1 | <i>Octasphales</i> MEYRICK | |
| Antenna $\frac{3}{4}$ | <i>Triptologa</i> MEYRICK | |
| 5. Fore wing with veins 8 and 9 out of 7. | <i>Parasophista</i> MEYRICK | |
| Fore wing with vein 9 separate, or connate or stalked with 10 . . . | | 6 |

6. Fore wing with veins 9 and 10 connate or stalked . . . *Barantola* WALKER
 Fore wing with vein 9 separate 7
7. Fore wing with vein 7 to costa 8
 Fore wing with vein 7 to apex or termen 10
8. Fore wing with veins 2 and 3 stalked *Euzelotica* gen. nov.
 Fore wing with veins 2 and 3 separate 9
9. Terminal segment of palpus with a strong scale-projection posteriorly, sometimes also anteriorly *Tonica* WALKER
 Terminal segment of palpus without scale-projection *Macrobathra* MEYRICK
10. Scape of antenna with pecten 11
 Scape of antenna without pecten 24
11. Fore wing with veins 2 and 3 stalked 12
 Fore wing with veins 2 and 3 separate, sometimes approximated . . . 13
12. Antenna $\frac{2}{3}$; fore wing with vein 7 to termen; hind wing trapezoid-ovate . .
 *Chezala* WALKER
 Antenna $\frac{3}{4}$; fore wing with vein 7 to apex; hind wing elongate-ovate. . . .
 *Elaeonoma* MEYRICK
13. Fore wing with vein 2 from $\frac{5}{6}$ *Delonoma* MEYRICK
 Fore wing with vein 2 from towards angle, from near angle or from angle 14
14. Thorax with crest. Fore wing with tufts of raised scales *Piloprepes* MEYRICK
 Thorax without crest. Fore wing without raised scale-tufts 15
15. Hind wing with vein 5 distinctly curved and approximated to 4 at base 16
 Hind wing with vein 5 parallel or nearly parallel 18
16. Terminal segment of palpus under $\frac{1}{2}$, thickened. Anterior tibia dilated with a broad brush of scales *Euhylecoetes* gen. nov.
 Terminal segment of palpus longer; 1 or under 1, anterior tibia normal 17
17. Terminal segment of palpus 1; fore wing with 2 from angle
 *Pyrophractis* MEYRICK
 Terminal segment of palpus under 1; fore wing with 2 from near angle
 *Epicurica* MEYRICK
18. Terminal segment of palpus stout, 1, pointed but not acute
 *Cormotypa* MEYRICK
 Terminal segment of palpus slender, if distinctly sealed then under 1 19
19. Hind wing ovate-lanceolate or lanceolate 20
 Hind wing trapezoid-ovate or elongate-ovate 21
20. Median segment of palpus not reaching base of antenna, terminal segment under 1 *Machaeritis* MEYRICK
 Median segment of palpus reaching base of antenna, terminal segment 1
 *Ocystola* MEYRICK
21. Fore wing with vein 7 to apex *Eulechria* MEYRICK
 Fore wing with vein 7 to termen 22
22. Median segment of palpus not or hardly reaching base of antenna
 *Coesyra* MEYRICK
 Median segment of palpus exceeding base of antenna 23
23. Median segment of palpus more than twice the length of face
 *Tanyzancla* MEYRICK
 Median segment of palpus shorter than twice the length of face.
 *Chrysonoma* MEYRICK
24. Median segment of palpus much exceeding base of antenna 25
 Median segment of palpus just reaching base of antenna 27
25. Terminal segment slender *Antiopala* MEYRICK
 Terminal segment distinctly sealed, sometimes with a scale-projection 26
26. Antenna 1; fore wing with vein 11 from before middle *Scorpiopsis* TURNER
 Antenna $\frac{4}{5}$; fore wing with vein 11 from middle . . *Hypercallia* STEPHENS

27. Terminal segment of palpus longer than the half of median; posterior tibia with large brush of very long, dense scales above, in male *Eclactistis* MEYRICK
Terminal segment of palpus slightly shorter than the half of median; posterior tibia with fine appressed hairs, in female *Xylestes* gen. nov.

Xylestes gen. nov. (fig. 703a)

ξύλον = wood, ἐσθήις = gown

Head with appressed scales. Ocellus posterior. Proboscis developed. Antenna $\frac{3}{4}$, minutely ciliated in female, scape rather short, smooth, without a pecten. Labial palpus rather long, curved, ascending, median segment just reaching the base of the antenna, thickened with appressed scales, slightly flattened, and weakly furrowed towards the apex below but hardly roughish, terminal segment thickened with closely appressed scales, slightly shorter than the half of the median, pointed. Maxillary

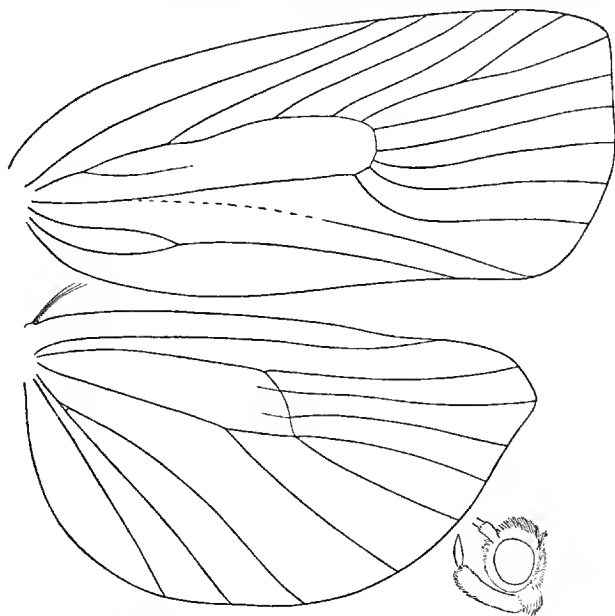


Fig. 703a. *Xylestes asper* gen. nov., spec. nov., female, head and wing neuration.

palpus moderate, slender, flattened, appressed, apex roughish. Thorax smooth. Posterior tibia clothed with fine appressed hairs. Fore wing rather broad, costa arched at the base, straight posteriorly, apex obtuse, termen slightly rounded, little oblique; without raised scale-tufts; 1b furcate at the base, 2 from before the angle, 3 from the angle, approximated to 4, 5 and 6 parallel, 7 and 8 stalked, 7 to termen, 9 separate, 11 from before the middle. Hind wing broadly semiovate, $1\frac{1}{4}$, cilia $\frac{1}{8}$, without a cubital pecten; 2 from beyond $\frac{3}{4}$, 3 and 4 connate from the angle, 5 distinctly curved at the base and approximated to 4, from lower $\frac{1}{3}$ of the cell, 6 and 7 parallel.

Genotype *Xylestes asper* spec. nov., female.

A peculiar form with exceptionally short palpi, of an obscure affinity.

Xylesthes asper spec. nov. (figs. 703a, 703b)

♀ 31 mm. Head tawny, face paler. Antenna tawny, ringed with pale ochreous. Palpus with the basal segment pale ochreous, median segment light tawny, with its lower edge pale ochreous, except towards the apex, which is suffused with brown, terminal segment tawny, densely irrorated with brown. Thorax tawny, suffused with brown anteriorly, tegula long, brownish-fulvous, apex edged with pale ochreous. Abdomen dark greyish-fuscous, apex, and venter, whitish-ochreous. Legs pale ochreous, anterior and median tarsus, bronze-fulvous. Fore wing broad, ovate-subtruncate, costa strongly arched anteriorly, moderately curved posteriorly, apex subrectangular, termen straight above, rounded beneath, vertical. Tawny-ochreous, densely suffused with pinkish-fulvous, costa suffused with light pink; anterior $\frac{3}{5}$ of the costa with some eight suffused greyish-lilac transverse marks, three anterior of these faint, linear, other forming cloudy spots, becoming larger posteriorly; an indication of a very faint broad suffused greyish transverse band just beyond the cell; a faint moderate spot below $\frac{4}{5}$ of the costa; numerous violet-black points scattered over the wing in irregular transverse outwardly curved series, well-defined before the apex and the termen, arranged along the veins in three to four irregular transverse rows; a moderate spot of an orange-fulvous suffusion in the middle of the disc just beyond the cell; dorsum darker, suffused with lilac-fulvous. Cilia pale whitish-lilac, basal half except its extreme base, greyish-lilac. Hind wing pale ochreous with brassy gloss, towards the apex and the termen suffused with pale pink, dorsum and basal half finely irrorated with dark fuscous-grey, this irroration somewhat extending along the veins posteriorly. Cilia pale greyish-ochreous, basal half, except the extreme base, dark fuscous-grey.

Ovipositor of the "floricomous" type, somewhat resembling that in certain Schoenotenidae; each lobe divided in a smaller apical, and a broader, basal, pad. Ostium wide, shallow, cup-shaped. Bursa copulatrix sausage-like, without a distinct ductus bursae. Signum, a small, lancet-shaped sclerite, with two medio-lateral groups of spinulae. (Slide no. 1028 D, type).

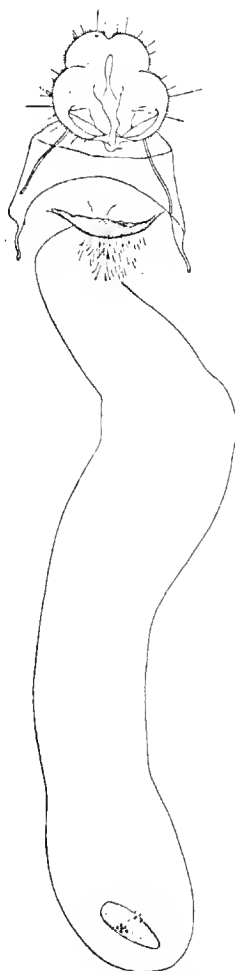


Fig. 703b. *Xylesthes asper* spec. nov., female genitalia.

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938.
One specimen.

Acriotes gen. nov. (fig. 704)

ἀκριοτέζ = like an *Acria*

Head with roughly appressed scales. Ocellus posterior (subinferior). Proboscis developed, smoothly scaled basally. Antenna slightly over 1, in female simple, scape moderately thickened, elongate, without a pecten. Labial palpus long, recurved, median segment much exceeding the base of the antenna, moderately thickened with smoothly appressed scales, somewhat expanded at the extreme apex below, terminal segment slightly under 1, slender, acute. Maxillary palpus short, slender, drooping. Thorax

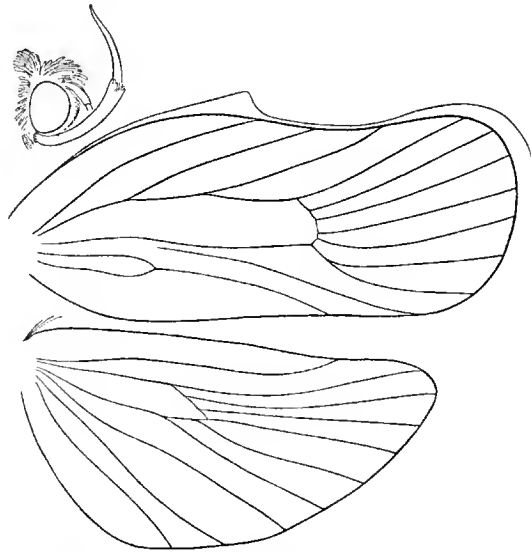


Fig. 704: *Acriotes saprocarpodes* gen. nov., spec. nov., female, head and wing neuration.

without a crest. Anterior tarsus longer than the tibia, not thickened. Median tibia towards apex thickened with closely appressed scales. Posterior tibia smoothly scaled. Fore wing elongate-ovate, costa ciliate, concave in the middle, with a projecting triangular tuft of scales at $\frac{1}{3}$, apex and termen strongly rounded, former indefinite. 1b long-furcate ($\frac{2}{5}$), 2 and 3 stalked from the angle, 4 and 5 moderately approximated, 6 apparently to the apex, 7 absent, 8 from below the angle, to the costa, 9 separate, from angle, 11 from $\frac{1}{3}$. Hind wing elongate-semiovate, about 1, cilia $\frac{1}{5}$, 2 from beyond $\frac{4}{5}$, 3 separate from 4, from before the angle, 4 from the angle, 5 not approximated, 6 and 7 remote, diverging, 8 sinuate, approximated to the upper edge of the cell along the basal fifth of the latter.

Genotype *Acriotes saprocarpodes* spec. nov., female.

An isolated genus, possibly allied to *Diaphorodes* TURNER, 1947, from Queensland. The origin of vein 8 in the fore wing, from below the angle of the cell, is peculiar. Superficially this insect reminds of the Xyloryctid genus *Acria*.

***Acriotes saprocarpodes* spec. nov. (figs. 697, 704)**

σαπρός = rotted, *καρποδές* = fruit-like

♀ 19 mm. Head, palpus and thorax dark grey, face, a narrow basal ring of the terminal segment of the palpus and scaling of the proboscis white. Antenna pale pink, banded with dark grey, scape dark grey above, except the apex. Abdomen fuscous-ochreous. Legs fuscous-whitish, coxae white, anterior leg dark grey, white-ringed, rings of the tarsus tinged pale pink. Fore wing elongate-ovate, narrowed beyond the middle, dilated again towards the termen; costa strongly arched anteriorly, prominent at $\frac{1}{3}$, moderately concave beyond the middle, with a triangular projection of cilia before the middle, another shorter one at $\frac{3}{4}$, hence costa appearing deeply excavate, apex strongly rounded, termen rounded, almost vertical. Costal $\frac{2}{5}$ from the base to the vein 8, light yellow, wing elsewhere pale greyish-fuscous, slightly tinged yellowish, markings dark fuscous-grey. A suffused elongate spot on the base of the costa; costal cilia to before the middle, pinkish, mixed with fuscous; a suffused greyish subcostal streak interrupted into three spots, dilated posteriorly, from beyond the base to the excavation; cilia along the latter yellowish-white, beyond this, pale pink; a suffused dark fuscous-grey streak from the base just above the dorsal edge to before $\frac{1}{4}$ of the dorsum; rows of rounded, rather irregular, unequal dots, along veins 11—10 from the cell to the costa, and about three longitudinal rows in and above the cell, arranged thus: along posterior half of the upper edge, above this, and from the base just above and along the fold, this row more distinct, its dots larger, becoming obscured and obliterate towards the end of the fold; a larger suffused spot in the centre of the cell before the middle; a somewhat curved, slightly outwards-oblique, broad, dark fuscous-grey patch just beyond the cell, from vein 8 to the end of the dorsum, mottled with roundish points of the ground colour; two faint suffused small spots on vein 12 well below the costa; an ill-defined cloudy dark fuscous-grey patch occupying the posterior fourth of the costa, subtriangular, narrowed below and faintly continued to the tornus by two curved rows of suffused dots, somewhat obscured by faint light greyish-fuscous suffusion, becoming ill-defined posteriorly and merging in the base of the post-cellular patch; termen beyond this patch suffused with greyish-yellowish-white; a dark greyish-fuscous marginal line from the costa to the tornus, extended between the terminations of the veins, so as to form round dots. Cilia along the

posterior fourth of the costa, and in the apex, pale pink, becoming greyish-whitish towards the tornus, barred throughout with light greyish-fuscous. Hind wing pale whitish-ochreous, touched with greyish, apical half from vein 1c to vein 8 suffused with pale lilac-fuscous, edge between these veins narrowly darker fuscous. Cilia pale fuscous-grey, becoming whitish towards the tornus and along the dorsum.

Ovipositor not crectile, tortricoid, lobes separated in a small apical and an elongate, basal part. Ostium very wide, limen not developed. Ductus bursae very broad, moderately long, coiled once, wall of the basal half strongly thickened. Bursa copulatrix moderate, ovoid. Signum, a large sclerotization of the entire wall of the distal half of the bursa, finely denticulate, in the middle with a dentate thickening. (Slide no. 880 D, type.)

Sigi Camp, 1500 m, February 19, 1939. One specimen. Strongly reminding of an *Acria*.

Hypercallia STEPHENS, 1834

Hypercallia STEPHENS, 1834, Illustr. Brit. Ent., vol. 4, p. 194. ZELLER, Isis, p. 191, 1836. HERRICH-SCHÄFFER, Schmett. Eur., vol. 5, p. 142, 1855. HEINEMANN, Schmett. Deutschl., vol. 3, part 2, p. 360, 1870. WALSINGHAM, Trans. Ent. Soc. Lond., 1881, p. 287, 1881. BUTLER, *ibidem*, 1883, p. 78, 1883. MEYRICK, Handb., p. 612, 1895. Gener. Ins., fasc. 180, p. 161, 1922. STAUDINGER & REBEL, Catal. Lep. Pal., vol. 2, p. 175, 1901. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 114, 1929. GAEDE, Lepid. Catal., part 92, pp. 255—256, 1939.

Coptotelia ZELLER, 1863, Stett. Ent. Zeit., vol. 24, p. 145.

Gonionota ZELLER, 1877, Hor. Soc. Ent. Ross., vol. 13, p. 381.

Brachyplatea ZELLER, 1877, *ibidem*, p. 383.

Agriocoma ZELLER, 1877, *ibidem*, p. 384.

Callistenoma BUTLER, 1883, Trans. Ent. Soc. Lond., 1883, p. 79.

Hyphypena WARREN, 1889, *ibidem*, p. 1889: p. 231.

Eumimographe DOGNIN, 1905, Ann. Soc. Ent. Belg., vol. 49, p. 86.

We were not able to detect any generic differences in the following species from the South American *Hypercallia*. It must be one more of the "stragglers", known in this genus. Our present knowledge of its remarkable distribution is as follows: South America: 85 species, South and Central America together: 3, Central America: 8, Mexico: 2, Haiti: 1, Africa: 1, Europe, Asia Minor and Mongolia: 1, China: 1, Sikkim and Assam: 3, New Guinea: 1!

Hypercallia sarcodes spec. nov. (fig. 700)

σαρκώσης = flesh-coloured

♂ 25 mm. Head pale ochreous with pinkish tinge. Palpus with the median segment pale ochreous-pink, with a few dark lilac scales towards its apex beneath, terminal segment light pink, posterior half mixed with dark lilac scales, tip pale ochreous. Antenna pale ochreous. Thorax pale

ochreous-fuscous, apex and tegulae pale ochreous, tinged pink. Abdomen pale ochreous. Legs ochreous-white, anterior tibia and tarsus suffused with pale pink anteriorly, posterior tibia and tarsus white, tarsus mixed with brownish towards its apex. Fore wing ovate, costa strongly arched throughout, apex broadly rounded, indefinite, apparently between veins 4 and 5, termen rounded, oblique. Pale ochreous, indistinctly retinate with fulvous, except towards the costa, this retination tending to form oblique strigulation, beyond the cell dissolved in rows of dots along the veins; costa, apex and termen suffused with light pink, costa more broadly so; dorsum irregularly irrorated and suffused with light sordid fulvous-fuscous; an irregular narrow longitudinal streak of a blackish-lilac irroration from base well above middle, at $\frac{1}{4}$ abruptly extended in a somewhat oblique almost isolated subovate spot, this markings edged with pale pink suffusion. Cilia pale pink-ochreous. Hind wing pale pink becoming pale pink-ochreous towards the base and the dorsum, cilia concolorous.

Tegumen broad, short. Uncus very broad, truncate, bristled along the edge, with two thickenings at the sides above. Socii, median haired appressed pads. Gnathos, a narrow transverse rod. Transtilla paired, with sinuate arms, with a clavate, denticulate top, ending in dense blunt teeth. Valva narrow, a subcostal row of bristles, sacculus distinct, under $\frac{1}{2}$. Vinculum broad, rounded. Anellus, a transverse plate. Aedoeagus straight, base bulbate. Cornuti absent. (Slide no. 1000 D, type.)

Araucaria Camp, 800 m, March 19, 1939. One specimen.

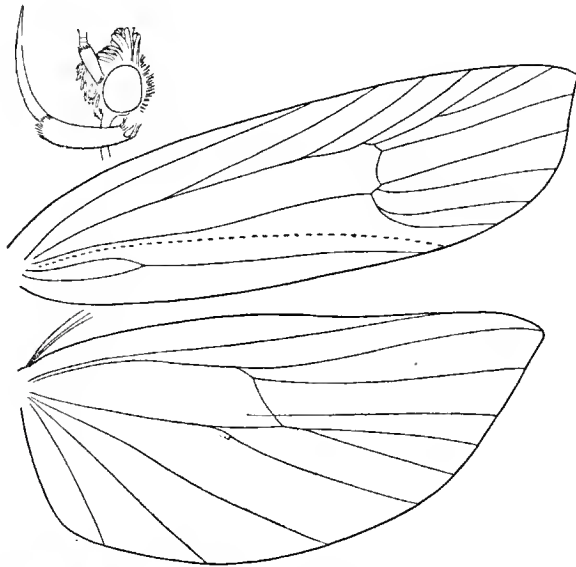


Fig. 705: *Euzeletica acrosperma* gen. nov., spec. nov., female, head and wing neurulation.

Euzelotica gen. nov. (fig. 705)*eu* = true, *ζηλωτικός* = eager

Head with appressed scales. Ocellus inferior. Proboscis developed. Antenna $\frac{3}{4}$, pubescent in the female, scape moderate, without a pecten. Labial palpus very long, recurved, ascending, median segment much exceeding the base of the antenna, considerably thickened with roughly appressed hairs, slightly expanded towards the apex; terminal segment about 1, slender, acute. Maxillary palpus small, appressed. Thorax without crest? (denuded). Median tibia with a median, and an apical whorl of moderately projecting scales. Posterior tibia considerably thickened with very dense loosely appressed scales. Fore wing elongate, rather narrow, costa curved at the base, apex subacute, termen rounded. 1b furcate, 2 and 3 stalked from the angle, 4 and 5 approximated at the base, 7 and 8 stalked, 7 to the costa, 11 from before the middle. Hind wing $1\frac{1}{2}$, trapezoid-ovate, pointed, cilia over $\frac{1}{3}$; 2 from $\frac{2}{3}$, 3 and 4 short-stalked from the angle, 5 parallel, submedian, 6 and 7 moderately approximated.

Genotype *Euzelotica acrosperma* spec. nov., female.

Euzelotica acrosperma spec. nov. (figs. 701, 705)*ἀκρόν* = edge, *σπέρμα* = seed

♀ 20 mm. Head and antenna pale ochreous. Palpus pale ochreous, median segment mixed, and suffused with dark fuscous along its lower half, and in a ring below its apex, terminal segment with a subapical dark fuscous ring. Thorax (rubbed) pale ochreous, suffused with dark fuscous except on the tegulae, and towards the apex. Abdomen pale ochreous, sides suffused with dark fuscous. Legs pale ochreous, anterior femur and tibia suffused with dark fuscous, median and posterior tibia with two spots of dark fuscous irroration, all tarsi dark fuscous, articulations of the segments with pale ochreous rings. Fore wing elongate, costa curved anteriorly, straight posteriorly, apex angularly pointed, termen almost straight, oblique. Pale ochreous. Costa with dark brown dots: two rounded dots, at the base and beyond $\frac{1}{6}$, respectively, an elongate dot beyond $\frac{2}{5}$, and five more along the posterior half to before the apex, two ultimate of these rounded and becoming tawny-brown; posterior half of the wing suffused with greyish-fuscous, this suffusion limited above by vein 7, below by the lower edge of the cell and vein 2; some brown irroration scattered on the posterior third of the cell and forming two interrupted longitudinal lines, below vein 7, and below vein 6, respectively, not reaching the termen; posterior half of the costa ochreous-whitish with a suffused, interrupted tawny subcostal streak running to below the penultimate costal dot; a faint series of ochreous-whitish subterminal dots between the veins. Cilia pale ochreous with an interrupted tawny ante-median shade, and a brownish bar opposite the apex. Hind wing glossy

ochreous-whitish, becoming brighter ochreous towards the apex. Cilia pale ochreous, a faint antemedian shade, abruptly becoming dark fuscous below the termination of vein 2, but almost disappearing again before the tornus.

Ovipositor lobes concave, together forming a groove. Eighth ventrite forming a broad transverse plate, its lower edge bearing two tubercles in its middle. Ostium indefinite. Ductus bursae broad, with a strong plicate colliculum. Bursa copulatrix simple. (Slide no. 1019 D, type.)

Moss Forest Camp, five km northeast of Lake Habbema, 2800 m, October 29, 1938. One specimen.

Scorpiopsis TURNER, 1894

Scorpiopsis TURNER, 1894, Trans. R. Soc. S. Austral., vol. 18, p. 132. Proc. Linn. Soc. N. S. Wales, vol. 72, p. 151, 1947. MEYRICK, Gener. Ins., fasc. 180, p. 161, 1922. FLETCHER, Mem. Agr. Ind., Entom., vol. 11, p. 201, 1929. GAEDE, Lepid. Catal., part 92, p. 255, 1939.

Gonionota MEYRICK, 1886. Proc. Linn. Soc. N. S. Wales, vol. 11, p. 1041.

Cerycostola MEYRICK, 1902, Trans. R. Soc. S. Austral., vol. 26, p. 163.

To the description of this genus may be added: the fore wing sometimes with small tufts of raised scales; the hind wing with vein 5 markedly curved downward at the base.

Key to the Papuan species of *Scorpiopsis*

1. Fore wing with veins 2—4 separate; two round snow-white raised spots in disc at $\frac{2}{3}$, edged with crimson *diplaneta* MEYRICK
- Fore wing with veins 3 and 4 out of 2; no round white spots in disc
 *exanthistis* MEYRICK

Scorpiopsis diplaneta MEYRICK, 1930

Scorpiopsis diplaneta MEYRICK, 1930, Exot. Microl., vol. 3, pp. 619—618. GAEDE, Lep. Catal., part 92, p. 255, 1939.

Distribution: British New Guinea: Biagi, Mambare River, 5000 feet, and Kumusi River. Netherlands New Guinea: Utaqua River, Snow Mountains.

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938. One male, one female.

Chezala WALKER, 1864

Chezala WALKER, 1864, List Lep. Het. Brit. Mus., vol. 29, p. 787. MEYRICK Gener. Ins., fasc. 180, p. 114, 1922. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 46, 1929. GAEDE, Lepid. Catal., part 88, p. 193, 1938. TURNER, Proc. Linn. Soc. N. S. Wales, vol. 66, p. 407, 1941.

Peltophora MEYRICK, 1883, *ibidem*, vol. 7, p. 421.

Pempeltias KIRKALDY, 1910, Canad. Ent., vol. 42, p. 8.

Key to the Papuan species of *Chezala*

1. Whitish-ochreous sprinkled with fuscous; dark dot on base of costa and short mark along base of dorsum. *limitaris* MEYRICK
 Light ochreous suffused with tawny and irrorated with dark brown; a narrow basal spot with irregular edge. *cathara* spec. nov.

***Chezala cathara* spec. nov. (fig. 699)**

καθαρός = candid

♂ 30 mm. Head and thorax light fuscous-brown, apex of the latter paler. Antenna light ochreous-tawny, ringed with dark brown, serrulate, ciliations 4, scape suffused with dark brown inferiorly. Palpus light ochreous-tawny, median segment moderately irrorated with light fuscous, except its upper edge. Abdomen light ochreous-tawny, two basal segments brown, posterior edges of all the segments pale tawny-ochreous, venter narrowly dark brown. Legs pale tawny-ochreous, irrorated (anterior leg suffused) with dark fuscous, except the bands around the articulations; posterior tibia haired throughout above. Fore wing subtriangular, strongly dilated, costa considerably curved towards the extremities, straight in the middle, apex subobtuse, termen straight, moderately oblique. Light ochreous suffused with tawny and irrorated, except towards the costa, with dark brown: markings formed by a dark coffee-brown irroration. A rather narrow basal spot, edge irregular, convex; stigmata conspicuous, first discal small, round, second discal transversely-semioval, plical elongate, hardly beyond first discal; an ill-defined spot of brown irroration from the second discal stigma to the costa, a smaller transverse spot, opposite this, on the dorsum; an ill-defined, irrorated and curved fascia from below $\frac{4}{5}$ of the costa to the preceding spot, acutely angulate anteriorly opposite the apex, the area between this fascia and the cell filled with coarser and less dense brown irroration; apex and termen suffused with deeper tawny. Cilia fuscous with pale ochreous base, mixed with darker fuscous in the tornus. Hind wing with vein 5 approximated; light tawny with a faint bronze gloss, towards the dorsal edge coarsely irrorated with fuscous, on the posterior $\frac{2}{5}$ moderately infuscated. Cilia pale ochreous-fuscous with an antemedian suffused dark fuscous band.

Tegumen broad at the base. Uncus rather small, point short, curved. Socii represented by sparse short hairs at the base of the uncus. Anal tube membranous. Gnathos large, with broad arms, finely denticulate posteriorly above, point pending. Transtilla, a broad band with dilated base, in the middle angulate upwards, and with the lower edge deeply incised. Valva narrowed, cucullus obtuse, sacculus moderate, $\frac{3}{4}$. Vinculum short, subobtuse. Aedoeagus moderate, little curved, with an apical hook, turned upward. Cornutus, a long blade. (Slide no. 1003 D, type.)

Moss Forest Camp, 2850 m, July 20, 1938. One specimen.

Epicurica MEYRICK, 1914

Epicurica MEYRICK, 1914, Exot. Microl., vol. 1, p. 252. Gener. Ins., fasc. 180, p. 135, 1922. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 80, 1929. GAEDE, Lepid. Catal., part 92, p. 230, 1939.

Key to the Papuan species of *Epicurica*

1. Markings partially crimson *nebuligera* spec. nov.
Without crimson markings 2
2. Hind wing infuscated *hystata* spec. nov.
Hind wing whitish-ochreous, not infuscated 3
3. Preterminal band formed by a faint fulvous suffusion *bilineata* spec. nov.
Preterminal band formed by a series of blackish semilunar marks between veins *cinnamomea* spec. nov.

***Epicurica cinnamomea* spec. nov. (fig. 702)**

♂ 26 mm. Head light tawny, face paler. Palpus pale tawny, apical segment little dilated in the male, irrorated with deeper tawny. Antenna whitish-fuscous, ringed with light fuscous, with a bronze gloss, ciliations 2. Thorax light tawny, deeper tawny anteriorly, apex pale tawny. Abdomen and legs whitish-ochreous, anterior leg suffused with light ochreous-tawny. Fore wing broad, dilated, costa considerably curved anteriorly, less curved posteriorly, apex triangular, rather obtusely pointed, termen sinuate above, little oblique. Ochreous-tawny, somewhat suffused with deeper tawny, moderately irrorated and marked with dark brown. Stigmata distinct, somewhat irregular, discal approximated, first discal beyond $\frac{1}{3}$, rounded, second discal slightly larger, before $\frac{2}{3}$, subrectangular, transverse, plical elongate, below the first discal; a moderate, elongate, strongly inwards-oblique spot of a brown irroration on the base, resting on the dorsum beyond the base; a pair of ill-defined moderate transverse fasciae, converging on the costa before $\frac{1}{4}$, anterior straight, almost direct, interrupted at $\frac{1}{3}$, posterior much curved above, including the first discal, and the plical stigmata, interrupted between those; sparse brown irroration occupying the middle of the wing, from beyond the first discal stigma to before the second, and from the dorsum to below the costa; a faint elongate tawny suffusion between the second discal stigma, and the costa, with a small brownish dot just below the costa beyond the middle; cloudy spots of brown irroration from below, and slightly beyond the second discal stigma to the tornus; indication of similar much fainter spots from that stigma towards the costa before the apex; a curved series of inter-neural dark brown prostrate-V-shaped marks, with points directed basad, before the termen, abruptly angulate anteriorly between veins 6 and 7, below them tolerably parallel to the termen, becoming paler below; followed by a subterminal band of ill-defined irroration from below $\frac{5}{6}$ of the costa to the tornus. Cilia pale ochreous-pinkish, with a row of brownish blotches on the basal half along the termen, costal cilia tawny. Hind

wing whitish-yellow, with a golden gloss, tinged ochreous towards the apex. Cilia concolorous.

Tegumen moderate. Uncus rather narrow, pointed, bristled dorsally. Gnathos very large, its arms with a dilated base, so as to reach the base of the tegumen, rounded anteriorly, constricted beyond the middle, hook forming a broad beak, denticulate above before the apex. A long pending curved rod attached below the gnathos, and inside its arms. Transtilla absent. Valva broad, cucullus narrowed in a blunt point, sacculus ending in a curved rising blunt spike. Vinculum slender, rounded. Anellus rounded; furca, two separate slender rods with apical bristles. Aedoeagus slender curved. Cornuti absent. (Slide no. 1004 D, type.)

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938. One specimen.

***Epicurica bilineata* spec. nov. (fig. 703)**

♀ 25 mm. Head yellowish-ochreous. Antenna ochreous mixed above with dark brown. Palpus brownish-ochreous, dorsal half of the median segment brown. Thorax tawny. Abdomen light fuscous-ochreous. Legs tawny-ochreous, anterior leg infuscated. Fore wing elongate-subtriangular, rather broad, costa curved, more so towards the base, apex triangularly pointed, somewhat projecting, termen sinuate, moderately oblique. Rather light ochreous, brighter towards the margins which are suffused with pinkish-lilac, costal edge pale pinkish-ochreous; base and dorsum moderately suffused with tawny, a short dark fuscous mark on costa beyond the base; stigmata not distinct, lilac; two parallel, straight somewhat inwardly oblique narrow transverse fasciæ of lilac suffusion, first from just before the middle of the costa to the dorsum before the middle, including the first discal and the plical stigmata, dilated on the costa, somewhat produced along it posteriorly; second broader, ill-defined below the middle of the disc, from about $\frac{4}{5}$ of the costa; second discal stigma transversely erect; termen suffused with pinkish-lilac from the apex to vein 3. Cilia whitish-pink, lilac opposite the apex, light pink along the costa. Hind wing and cilia, pale golden-yellow.

Ovipositor pointed. Ostium indefinite. Ductus bursae proximally, an oval sack with several semilunar sclerites, below this rather narrow. Bursa copulatrix small. Signum, a small stellate sclerite. (Slide no. 1020 D, type.)

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938. One, rather damaged, specimen. Allied to the preceding species.

***Epicurica nebuligera* spec. nov. (fig. 698)**

♂ 18 mm. Head whitish-yellow, vertex brighter yellow, side-tufts suffused with fuscous and crimson. Antenna yellowish, ringed with fuscous. Palpus light yellow, dorsal half, a subapical ring of the median segment, and two rings of the apical, crimson. Thorax (damaged) pale

ochreous-yellow mixed with pinkish, anterior third brownish, with a large deep ochreous spot on each shoulder. Abdomen pale ochreous, posterior half with bands of fine brassy setae, anal tuft pale pink, venter pale ochreous, tinged pink. Legs light crimson, lower edge and articulations pale ochreous, tarsi ochreous (posterior legs missing). Fore wing subovate, costa curved, apex obtusely pointed, termen moderately sinuate, little oblique. Light yellow, becoming bright yellow towards the base of the costa; costal edge suffused with pale pink; markings dark fuscous, narrowly edged with bright crimson suffusion: a fascia from the dorsum beyond the middle, fureate in its middle, arms to the base and to $\frac{1}{4}$ of the costa, respectively, posterior arm with a rounded dilatation below the costa; furcation encloses a semioval eostal patch of the bright yellow ground colour, slightly mixed in the middle with crimson; a small round spot on the base of the dorsum; a broad, crenate-triangular patch from $\frac{3}{5}$ of the costa to the dorsum beyond the middle, its base occupying somewhat less than one third of the dorsum, its anterior edge moderately convex, with two angulate projections, at $\frac{1}{3}$, and in the fold, almost connected with the subbasal fascia; posterior edge of the patch with a moderate subcostal projection, below this excavated at $\frac{1}{3}$ and $\frac{2}{3}$, respectively; a transverse blotch of crimson suffusion beyond the lower concavity of the above mentioned patch; a transverse fascia from beyond $\frac{5}{6}$ of the costa to the tornus, broadly dilated, and with a rounded projection anteriorly in the upper half of the disc, its posterior edge concave opposite this; this fascia is gradually attenuated along the lower half; a subterminal row of suffused crimson elongate spots between the veins, becoming smaller towards the tornus, not reaching it; a narrow crimson marginal line from the apex, thickened around apex, not reaching the tornus, along the lower half of the tornus dissolved in small dots on the terminations of the veins. Cilia pale yellow, suffused with crimson except towards the tips, in tornus with a grey suffused patch. Hind wing pale pink, becoming pale ochreous towards the base, cilia pale ochreous, with a pale pink basal half.

Genitalia very similar to those of *E. cinnamomea*. Uncus obtuse. Gnathos with narrower hook which is stronger dentate above before the apex. The rod below the gnathos, narrower. Valva with a more concave costa, the spike of the saeculus acute. Vinculum broader. Arms of the furca with more dilated bases. Aedoeagus shorter. (Slide no. 1005 D, type.)

Araucaria Camp, 800 m, March 18, 1939. One specimen.

***Epicurica hystata* spec. nov. (fig. 712)**

ὕστατος = latest

♂ 21 mm. Head, thorax, pale ochreous, shoulder infuscated. Antenna dark fuscous, scape pale ochreous at its apex. Palpus pale ochreous, base of the median segment and the basal segment suffused with dark fuscous.

Abdomen (strongly damaged) pale ochreous? Legs (almost completely missing) with anterior femur, fuscous. Fore wing elongate-subtriangular, rather narrow, considerably dilated, broadest at $\frac{3}{4}$; costa curved anteriorly, straight posteriorly, gently concave in the middle, apex obtusely pointed, termen moderately rounded, oblique. Glossy pale ochreous, tinged deeper straw-ochreous towards the apex; markings formed by a dark fuscous-brown irroration. Costal edge narrowly suffused with light ochreous. A dark fuscous elongate costal patch occupying less than one-sixth of its base, rather well-defined, narrowed posteriorly and at the extreme base, its lower edge with a rounded prominence beyond the base; an elongate-ovate, narrow spot at $\frac{3}{5}$ of the costa; an elongate suffused inwardly oblique transverse spot on $\frac{4}{5}$ of the costa; irregular brown marks on terminations of the veins from beyond this to the tornus; larger of these on veins 8, 7 and 6; a narrow brownish marginal line along the lower part of the termen, dilated in the tornus so as to form an ill-defined suffused elongate patch; first discal stigma represented by an elongate, moderate submedian spot at $\frac{1}{3}$, plical stigma also elongate, smaller, somewhat before the first discal; an ill-defined transverse spot of a brownish irroration extending over the closing vein; a small elongate dot on $\frac{3}{4}$ of the dorsum; the wing beyond cell irregularly strewn with brownish scales which tend to form a connection between the second discal patch and the tornus, and between the costal spot at $\frac{3}{4}$ with the middle of the disc. Cilia light straw-ochreous, with an antemedian band of brownish irroration, brown marks on the terminations of the veins extending over the base of the cilia. Hind wing pale greyish-ochreous, glossy, densely and evenly irrorated with fuscous, cilia pale golden-ochreous, a faint antemedian shade towards the apex.

Uncus moderate, little curved. Gnathos large, denticulate above before its top which forms a strong curved point. Transtilla, a moderate band. Valva broad, cucullus rounded, sacculus 1, ending in a blunt apical process. Furca absent. Aedoeagus little curved. Signum, a slender rod, its anterior half dilated, so as to form two pointed blades. (Slide no. 1123 D, type.)

Serce Valley Camp, 3800 m, September 22, 1938. One specimen.

Epicurica spec.

Baliem Camp, 1700 m, November 16—27, 1939. One female. An elegant crimson coloured species, but too much damaged, and unfit for description.

Euhylecoetes gen. nov. (fig. 706)

ev = true, *ἔλρηκοίτης* = forest dweller

Head with appressed scales, side-tufts spreading. Ocellus inferior. Proboscis developed. Antenna minutely pubescent in the female, scape elongate, with a strong pecten. Labial palpus moderately long, recurved,

ascending, median segment reaching to the base of the antenna, thickened with appressed scales, slightly furrowed towards the apex below, but hardly roughish, terminal segment over $\frac{1}{2}$ of the median, slightly thickened, acute. Maxillary palpus small, appressed. Thorax smooth. Anterior

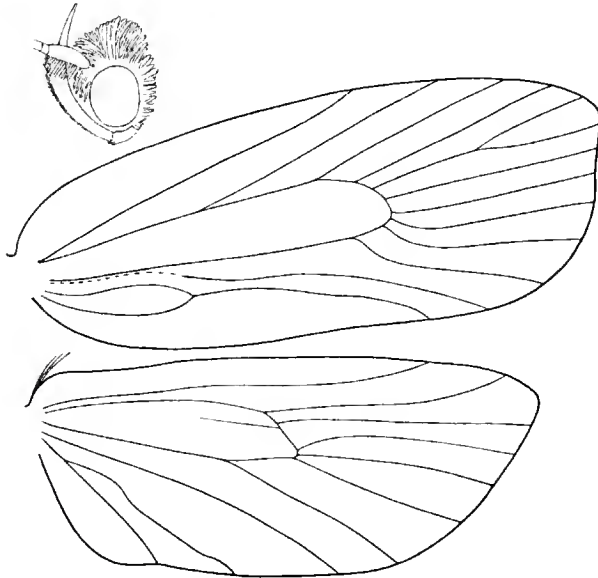


Fig. 706. *Euhylecoetes rhodophylla* gen. nov., spec. nov., female, head and wing neuration.

tibia dilated with dense appressed scales, towards the apex forming a broad pencil, enveloping the posterior half of the tibia, except on its inner side. Median and posterior tibiae covered with dense long appressed hairs. Fore wing without raised tufts, elongate-ovate, costa angularly arched at the base, curved in the middle, apex and termen rounded. 1b furcate, 2 from towards angle, 3 from angle, 3—5 equidistant, approximated, 7 and 8 stalked, 7 to termen just below the apex, 11 from middle. Hind wing semiovate, over 1, cilia $\frac{1}{3}$; 2 from $\frac{3}{4}$, 3 and 4 approximated from the angle, 5 approximated to 4, 6 and 7 parallel anteriorly, diverging posteriorly, closing vein between them strongly outwardly oblique, 8 free.

Genotype *Euhylecoetes rhodophylla* spec. nov., female.

Euhylecoetes rhodophylla spec. nov. (figs. 706, 711)

ῥόδον = rose, φύλλον = leaf

♀ 38 mm. Head pale ochreous, side-tufts suffused with greyish-lilac. Antenna dark lilac-grey, base of the flagellum, and scape, pale ochreous. Palpus whitish-ochreous slightly mixed with lilac at the base, and towards the apex. Thorax fulvous-lilac, a large erect-ovate apical spot, lilac-

blackish finely irrorated with pale ochreous. Abdomen and legs whitish-ochreous, anterior femur suffused with dark lilac-grey above, anterior tibia with the inner side from the base to beyond the middle, dark lilac-grey, apical $\frac{1}{3}$ ferruginous, anterior tarsus broadly banded with dark lilac-grey. Fore wing elongate-ovate, costa abruptly and angularly projecting at the base, gradually curved from beyond the base to the apex, long-ciliated throughout, apex rounded, termen rounded, almost vertical. Bright glossy fulvous, suffused with pinkish-lilac; four transverse, outwardly oblique series of markings, formed by a dull lilac-black irroration, slightly mixed with whitish-ochreous; first of these series at $\frac{1}{5}$, formed by two moderate rounded spots, lower largest, just above fold, upper spot halfway between this and the costa; second series at $\frac{2}{5}$, slightly outwards-curved, formed by the indication of some four rounded dots; third series, an obliquely ovate ocellus on the closing vein, whitish, broadly edged with lilac-black, a few scattered scales above, and a cloudy spot below this; a row of small interneural dots halfway between this and the termen, three dots in oblique series from below the costa to vein 7, four, in an outwardly curved series, shifted more distad, last of these above vein 3. Cilia light fulvous-pink. Hind wing whitish-ochreous; cilia whitish-ochreous, around apical third of the wing suffused with light pink, except towards the base.

Ovipositor erect, pointed. Seventh sternite sclerotized, simple. Ductus bursae spiraled below, colliculum small, cylindrical. Bursa copulatrix elongate. Signum, a dentate small body. (Slide no. 1018 C, type.)

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938. One specimen.

Cormotypa MEYRICK, 1914

Cormotypa, 1914, Exot. Microl., vol. 1, p. 250. Genit. Ins., fasc. 180, p. 127, 1922. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 56, 1929. GAEDE, Lepid. Catal., part 92, p. 218, 1939. TURNER, Proc. Linn. Soc. N. S. Wales, vol. 66, p. 413, 1941.

Cormotypa leucochrysa spec. nov. (fig. 708)

λευκός = pale, *χρύσος* = gold

♀ 23 mm. Head, palpus, thorax and abdomen whitish, with a golden gloss. Legs whitish-yellow, anterior leg slightly infuscated. Fore wing elongate-subtriangular, costa moderately curved towards the extremities, little so in the middle, apex obtusely pointed, termen straight, considerably oblique. Yellowish-white, with a bright golden gloss, markings dark fuscous. An irrorated patch on the base of the costa, somewhat extended along vein 12 and above the fold, below terminated by the fold; stigmata formed by an irregular irroration, conspicuous; first discal rounded, at $\frac{1}{3}$, second narrowly transverse, fasciate, almost interrupted

in the middle, plical irregularly elongate, below the first discal, as large as this; an irregular irrorated spot on the dorsum before the tornus; sparse dark scales scattered between these markings, more or less interconnecting them, and connecting the plical stigma with the dorsum; a still sparser dark irroration extending from beyond the upper edge of the cell to $\frac{4}{5}$ of the costa; a subterminal row of irregular small spots between the veins, more or less interconnected, becoming smaller towards the tornus; some marginal irroration in the apex and along the termen. Cilia yellowish-white, glossy, mixed with a few fuscous scales. Hind wing yellowish-white, paler than the fore wing, cilia concolorous.

Ovipositor extremely long, erectile, tineoid. Anapophyses undulate. Ostium indefinite. Ductus bursae and bursa copulatrix apparently very weak, not traceable in the mount. (Slide no. 1021 D, type.)

Moss Forest Camp, 2600—2800 m, October 9—November 5, 1938. One specimen. In the fore wing, vein 2 originates from before the angle. Identification without a corresponding male is somewhat uncertain.

Antiopala MEYRICK, 1889

Antiopala MEYRICK, 1889, Proc. Linn. Soc. N. S. Wales, vol. 13, p. 1646. Gener. Ins., fasc. 180, p. 110, 1922. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 17, 1929. GAEDE, Lepid. Catal., part 88, p. 190, 1938. TURNER, Proc. Linn. Soc. N. S. Wales, vol. 64, p. 71, 1939. *Ibidem*, vol. 69, p. 50, 1944.

Antiopala copiara spec. nov. (fig. 713)

κοπιαρός = tiring

♂ 19 mm. Head, antenna, thorax, and abdomen pale ochreous, sides of the abdomen infuscated in the middle. Palpus pale ochreous, basal segment and the basal half of the median, dark fuscous. Legs fuscous, articulations of the segments and a faint median ring of all the tibiae, pale ochreous; posterior tibia smooth. Fore wing elongate-subtriangular, rather narrow, broadest at $\frac{3}{4}$, costa gently curved anteriorly, straight posteriorly, apex obtuse, termen gently rounded, very oblique. Whitish-ochreous, with a golden gloss, costa narrowly suffused with brighter ochreous, markings fuscous. A small basal patch, with a strongly inwardly oblique, straight edge, ill-defined on the dorsum; a short streak at $\frac{3}{5}$ of the costa; a wedge-shaped suffused transverse streak at $\frac{5}{6}$ of the costa, its lower half much narrowed and ill-defined, curved parallel to the tornus, reaching to vein 4; an ill-defined marginal line from the termination of the vein 8 to before the tornus, dilated on the veins, so as to form small dots; stigmata formed by dark fuscous irroration, first discal moderate, round, plical below and slightly beyond it, smaller, irregular, second discal shaped as an interrupted narrow streak along the closing vein; some fuscous irroration, forming a faint spot on the dorsum before the tornus, and a few scales scattered

above the tornus. Cilia pale golden-ochreous, slightly mixed with brownish towards the apex, becoming paler towards the tornus. Hind wing glossy pale greyish-ochreous, cilia pale ochreous.

Tegumen conical. Uncus pointed. Gnathos very large, porrect, arms broad at the base, hook densely denticulate before the apex which is acute. Transtilla moderate, dilated at the extremities. Valva subovate, disc concave, cucullus rounded, sacculus over 1, ending in a short hook. Vinculum short, rounded. Aedoeagus stout. Cornutus, a large spike. (Slide no. 1022 D, type.)

Letterbox Camp, 3600 m, September 8, 1938. One specimen.

Machaeritis MEYRICK, 1883

Machaeritis MEYRICK, 1883, Proc. Linn. Soc. N. S. Wales, vol. 7, p. 422. *Ibidem*, vol. 10, p. 766. 1886. Gener. Ins., fasc. 180, p. 87, 1922. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 131, 1922. GAEDE, Lepid. Catal., part 88, p. 147, 1938.

Machaeritis, TURNER, 1940, Proc. Linn. Soc. N. S. Wales, vol. 65, p. 425.

Machaeritis epidela spec. nov. (fig. 709)

επιδηλος = distinct

♂ 14 mm. Head, antenna, thorax, and abdomen, pale brownish-ochreous. Palpus yellowish-ochreous mixed with fuscous. Legs light ochreous, anterior leg infuscated, median slightly irrorated with fuscous, with the knee and the tarsus fuscous-ringed, posterior tibia with smoothly appressed long hairs, spurs slightly infuscated. Fore wing subovate, pointed, broadest before the middle, costa moderately curved towards extremities, apex pointed, termen rounded, oblique. Deep ochreous, markings formed by a dark purplish-brown irroration. A suffused narrow streak along the base of the costa; scanty irroration over the costal fourth of the wing; a wedge-shaped suffused transverse patch across the closing vein to the end of the dorsum, acute above, posterior edge rather well-defined, slightly outwardly oblique, base extended posteriorly, and connected with a large terminal patch dilated above, just reaching costa and becoming paler in the apex. Cilia orange-ochreous, in the tornus suffused with lilac-fuscous except the base. Hind wing and cilia pale orange-ochreous, thinly scaled in the cell and towards the base.

Tegumen moderately erect, shoulders thickened. Uncus very small slender, porrect, pointed, below this with a ventral, denticulate area. Gnathos absent. Transtilla, a slender rod. Valva strongly sclerotized, costa with a long, strong, curved projection posteriorly, a bristled pad in the disc at its base; cucullus small, triangular, pointed; sacculus ill-defined. Vinculum rounded. Aedoeagus stout, robust, with a split below its top. Cornutus, a long curved spike, with an acute triangular process at its base. (Slide no. 1023 D, type.)

Rattan Camp, 1200 m, February 5, 1939. One specimen.

Ocystola MEYRICK, 1885

Ocystola MEYRICK, 1885, Proc. Linn. Soc. N.S. Wales, vol. 9, p. 1058. Gener. Ins., Fasc. 180, p. 91, 1922. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 150, 1929. GAEDE, Lepid. Catal., part 88, p. 151, 1938. TURNER, Proc. Linn. Soc. N.S. Wales, vol. 65, p. 432, 1940 (synonyms: *Haplodyta*, *Laxonomia*).

Haplodyta MEYRICK, 1883, Proc. Linn. Soc. N.S. Wales, vol. 7, p. 422; *ibidem*, vol. 10, p. 765, 1886. Gener. Ins., fasc. 180, p. 88, 1922. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 103, 1929. GAEDE, Lepid. Catal., part 88, p. 149, 1938.

Laxonomia MEYRICK, 1914, Exot. Microl., vol. 1, p. 240. Gener. Ins., fasc. 180, p. 89, 1922. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 123, 1929. GAEDE, Lepid. Catal., part 88, p. 150, 1938.

***Ocystola fumosa* spec. nov. (fig. 710)**

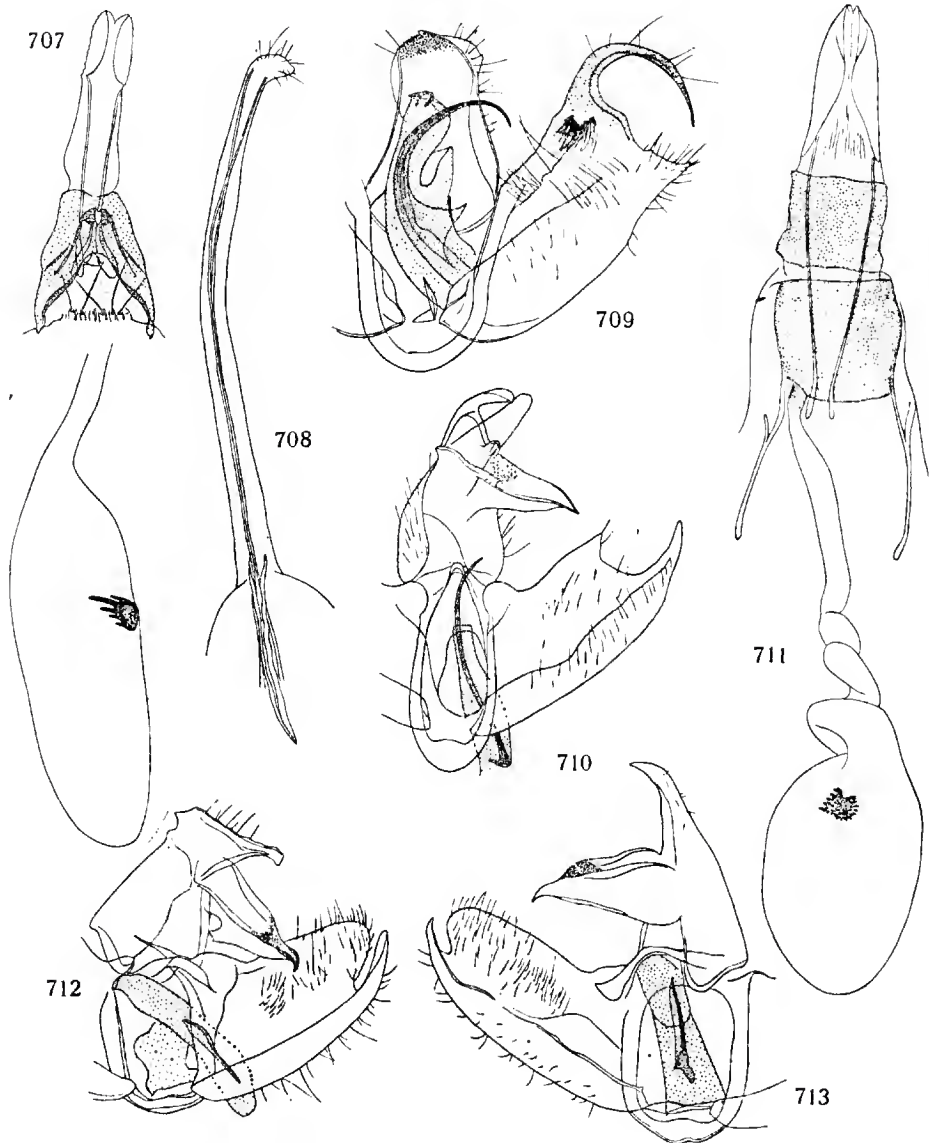
♂ 17.5 mm. Head antenna, palpus, and thorax, dark bronze-brown terminal segment of the palpus with the base, and the tip, mixed with sordid whitish, apical half of the tegula yellowish-white. Abdomen fuscous-grey with a bronze gloss. Legs dark bronze-fuscous, tarsi paler. Fore wing elongate-subovate, rather narrow, broadest in the middle, costa moderately curved, apex rather pointed, termen slightly rounded, very oblique. Yellowish-white, irrorated with blackish-fuscous, markings extended, blackish-fuscous. A streak along the anterior half of the costa reaching to vein 12, posterior half of the costa irrorated with blackish-fuscous; a broad transverse suffused blotch before $\frac{1}{4}$, moderately dilated above, posterior edge with two projections, in the cell and in the fold, respectively; another similar blotch at $\frac{3}{5}$, broader, subtriangular, becoming paler towards the costa, enclosing a round spot of ground colour above the middle, connected with the preceding blotch by a broad longitudinal streak of dense dark fuscous irroration, occupying the median third of wing; a large apical patch occupying about $\frac{1}{4}$ of the wing, its edge inwardly oblique from about $\frac{4}{5}$ of the costa to the tornus, connected with the preceding patch by a broad projection in the middle, and by a narrower projection along the tornus; a subterminal row of ill-defined, rounded spots of the ground colour, from the apex to the tornus. Cilia dark fuscous, dotted along their middle with blackish-fuscous. Hind wing blackish-bronze, cilia dark bronze-fuscous.

Tegumen narrowed. Uncus small, with a broad base, and an obtuse point. Anal tube distinct. Gnathos very large, broad, arms forming together a groove, top acute. Transtilla moderate, constricted in the middle with a short porrect point. Valva with a concave top, cucullus small, pointed, sacculus over 1, with a projecting point. Vinculum rounded. Aedocagus moderate, narrowed. Cornutus, a sinuate long spine. (Slide no. 1024 D, type.)

Lake Habbema, 3250—3300 m, August 10, 1938. One specimen.

Delonoma MEYRICK, 1914

Delonoma MEYRICK, 1914, Exot. Microl., vol. 1, p. 193. Gener. Ins., fasc. 180, p. 136, 1922. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 65, 1929. GAEDE, Lepid. Catal., part 92, p. 231, 1939.



Genitalia of Oecophoridae. Fig. 707: *Tonica nigrimarginata* spec. nov., female. Fig. 708: *Cormotypha leucochrysa* spec. nov., female. Fig. 709: *Machaeritis epidela* spec. nov., male. Fig. 710: *Ocystola fumosa* spec. nov., male. Fig. 711: *Euhylecoetes rhodophylla* spec. nov., male. Fig. 712: *Epicurica hystata* spec. nov., female. Fig. 713: *Antiopala copiara* spec. nov., male.

In MEYRICK's key to the genera of the "Oecophoridae" in the *Genera Insectorum* the genera *Delonoma* and *Tanyzancla* (p. 11) are separated by the shape of the terminal segment of the labial palpus which is somewhat thickened in the former, slender in the latter genus. This is not correct, because the terminal segment of the palpus in *Delonoma* is slender as well, which is stated by MEYRICK himself in the original description of the genus. Therefore point 175 of the mentioned key should be corrected, e.g., as follows:

175. Fore wing with vein 2 from $\frac{5}{6}$ *Delonoma*
 Fore wing with vein 2 from near angle *Tanyzancla*

Furthermore, paragraph 154 of the same key may give rise to confusion, as its second line, which leads to *Delonoma* states: "Hindwing with 5 not curved and approximated to 4 at base". In fact vein 5 in the present genus is distinctly bent downward towards the base, and originates from about the lower third of the closing vein, between the veins 4 and 6.

Key to the species of *Delonoma*

1. Fore wing with veins 3 and 4 stalked; costal streak with triangular transverse projections at $\frac{1}{4}$ and $\frac{3}{4}$ *iothorinca* MEYRICK
 Fore wing with veins 3 and 4 separate; costal streak with a short inwardly oblique transverse streak at $\frac{1}{3}$, and a V-shaped mark at $\frac{3}{4}$ *pyrrhoplecta* MEYRICK

Delonoma pyrrhoplecta MEYRICK, 1918

Delonoma pyrrhoplecta MEYRICK, 1918, Exot. Microl., vol. 2, pp. 219–220. Gener. Ins., fasc. 180, p. 136, 1922. Trans. Ent. Soc. Lond., vol. 87, p. 514, 1938. GAEDE, Lepid. Catal., part 88, p. 231, 1938–1939.

Distribution: Netherlands New Guinea, Setekwa River, 2000–3000 feet. Papua, Mount Tafa, 8500 feet; Kokoda, 1300 feet.

Araucaria Camp, 800 m, March 19, 1939. Rattan Camp, 1200 m, February–March, 1939. Two males.

Tonica WALKER, 1864

Tonica WALKER, 1864, List Lep. Het. Brit. Mus., vol. 29, p. 809. MEYRICK, Gener. Ins., fasc. 180, p. 167, 1922. GAEDE, Lepid. Catal., part 88, p. 266, 1938. FLETCHER, Mem. Agr. Ind., Ent., vol. 11, p. 226, 1929. TURNER, Proc. Linn. Soc. N.S. Wales, vol. 72, p. 155, 1947.

Binsilla WALKER, 1864, List Lep. Het. Brit. Mus., vol. 29, p. 832.

Teratomorpha TURNER, 1896, Trans. Roy. Soc. S. Austral., vol. 20, p. 20.

Cononia SNELLEN, 1901, Tijdschr. Ent., vol. 44, p. 80.

Key to the Papuan species of *Tonica*

1. An irregular, triangular, dark indigo-blue patch on basal fourth of costa *cyanodoxa* MEYRICK

 No such patch. 2

2. Apex of both fore and hind wing narrowly edged with blackish
 *nigrimarginata* spec. nov.
 Not thus 3
3. A short black or brown dash towards costa at $\frac{1}{3}$ *nixogama* MEYRICK
 No such dash 4
4. Whitish-ochreous, costal edge infuscated towards $\frac{1}{4}$; three to four raised tufts of
 fuscous, and dark fuscous scales towards costa posteriorly *malthacodes* MEYRICK
 Whitish-ochreous mixed or suffused with light brownish, more or less strewn
 with blackish scales in longitudinal lines *senescens* MEYRICK

Tonica cyanodoxa MEYRICK, 1924

Tonica cyanodoxa MEYRICK, 1924, Exot. Microl., vol. 3, p. 105.

Distribution: Netherlands New Guinea, Nomnagihé, 2000 feet

Bewani Mountains, Ampas, December 25, 1938 (STÜBER). One female, a very large specimen: 51 mm! (MEYRICK records 40—44 mm), slightly differing from the original description in having only one-fifth instead of one-fourth of the hind wing pale ochreous, and the cilia dark fuscous instead of grey. The abdomen (omitted in the description) is dark greyish-fuscous, becoming pale ochreous towards the base. The legs are blackish-fuscous, with the posterior tibia ochreous-yellow, and the posterior tarsus indigo-black.

Tonica nigrimarginata spec. nov. (fig. 707)

♀ 23 mm. Head and thorax creamy-whitish, more or less mixed with pale tawny. Antenna pale fuscous, suffused with creamy-whitish. Palpus with the median segment elongate-subrectangular, rough, its lower edge, a spot on the apical tuft above, and a few scattered scales towards the middle of the upper edge, fuscous-grey; terminal segment very slender, with two narrow rings, and the tip, blackish, with a small dorsal tuft beyond $\frac{1}{3}$, and a minute one at $\frac{2}{3}$. Abdomen creamy, posterior $\frac{2}{3}$ suffused with fuscous-grey, more so towards the apex, venter fuscous-grey. Legs creamy, tarsi fuscous, posterior tibia suffused with greyish-fuscous below, tarsus bronze-fuscous, with a whitish base, and a narrow median white ring. Fore wing elongate-subtruncate, costa moderately curved anteriorly, with an excavation somewhat beyond the middle, accentuated by two prominent tufts of the costal cilia, before and beyond concavity, which is smooth; costa slightly sinuate towards the apex, apex rounded-prominent, termen moderately sinuate, little oblique. Creamy, suffused and irrorated with pale fuscous-tawny, markings fuscous-blackish. A subcostal row of fuscous-blackish scales from the base, running from below the first costal tuft to about $\frac{6}{7}$ of the wing, and forming four or five irregular irrorated small spots, thence rectangularly bent, almost vertical, to the tornus, forming smaller irregular dots between the veins, largest of these, tornal; two narrow streaks of fuscous-blackish irroration just

above, and below, and parallel to posterior half of the fold, respectively, ending on the dorsum; some cloudy fuscous-greyish irroration mixed with fuscous-blackish scales in the middle of the cell, and a faint indication of a transverse cloudy greyish band across the central half of the disc at $\frac{3}{4}$, irregularly mixed with a few dark scales; a row of ill-defined streaks between the veins along the termen, becoming indistinct towards the tornus; irregular grey irroration mixed with fuscous-black scales along the dorsum from beyond the base. Cilia creamy with light tawny tips, and with a pale tawny interrupted antemedian fascia becoming narrower, continuous, and darker, towards the apex, around the apex forming a narrow, fuscous-black antemedian line; costal cilia and tufts fuscous-tawny, tinged olive. Hind wing glossy fuscous, becoming creamy at the base, and towards the costa anteriorly; cilia pale fuscous-grey, a black subbasal line around the apex.

Ovipositor moderate. Genital ventrite strongly sclerotized, with a deeply excavate lower edge, and a median process, on the top of which opens a split-like, narrow ostium. Ductus bursae simple. Bursa copulatrix elongate. Signum, a rounded plate with strong unequal dentations. (Slide no. 1025 D, type.)

Bernhard Camp B, 100 m, April 10, 1938. One specimen. Nearest to *T. malthacodes* MEYRICK.

ORNEODIDAE

Key to the genera of the Orneodidae

1. Hind wing seven-cleft 2
Hind wing six-cleft 3
2. Labial palpus with terminal segment porrect. Fore wing with veins 8-10 out of 7 *Hebdomactis* MEYRICK
Labial palpus with terminal segment ascending. Fore wing with veins 8-10 from cell *Triscaedecia* HAMPSON
3. Fore wing cleft to about middle 4
Fore wing cleft to $\frac{1}{3}$, $\frac{1}{5}$ or $\frac{1}{6}$ 5
4. Palpus extremely long *Microschismus* FLETCHER
Palpus rather short *Paelia* WALKER
5. Maxillary palpus absent. Fore wing with veins 8-10 absent.
. *Orneodes* LATREILLE
Maxillary palpus present. Fore wing with veins 8-10 out of 7 6
6. Hind wing cleft to $\frac{1}{5}$ *Hexeretmis* MEYRICK
Hind wing cleft to almost $\frac{1}{3}$ *Prymnotomis* MEYRICK

Orneodes LATREILLE, 1802

Orneodes LATREILLE, 1802, Hist. Nat. Crust. Ins., vol. 3, p. 418. Précis Charact. Ins., p. 148, 1796 (invalid). MEYRICK, Gener. Ins. fasc. 108, p. 2, 1910. Rev. Handb., p. 692, 1928, SPULER, Schm. Eur., vol. 2, p. 330, 1910. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 155, 1929. PIERCE, Genit. Brit. Tin., p. 39, pl. 22, 1935. Genit. Brit. Pyral., p. 59, pl. 29, 1938.

Ripidophora HÜBNER, 1806, Tentamen, p. 2 (*nomen nudum*).

Euchiradia HÜBNER, 1826, Verz. bek. Schm., p. 431.

Alucita auctorum, nec LINNÉ .

Tegumen moderate, somewhat rounded laterally, narrowed. Uneus with a triangular base, and a long slender clavate apical projection. Socii absent. Gnathos, a strong, dagger-like, Y or T-shaped, pending hook with short arms. Transtilla mostly absent, sometimes labides present. Valva with a longitudinally and strongly extended base, disc reduced to a small triangular costa at the base of tegumen, forming an elongate sparsely bristled eucellus, and a basal bristled knob. Vinculum strong, elongate, apex truncate or rounded. A strong furca present, shaped like a pair of rising or porrect, often long, blades. Aedocagus broad, tubular, sometimes with a vesicular base. Cornuti, a sheaf of strong bristles or a patch of dentations.

Ovipositor erectile, moderately long, slender, lobes pointed, sparsely and finely bristled. Ostium and ductus bursae little modified. Bursa copulatrix spheroid, sometimes finely denticulate. Signa, large dentations, or absent.

Key to the Papuan species of *Orneodes*

1. Hind wing white, finely fasciate with blackish, two bright orange or brownish-yellow triangular patches, and a round black patch, on lobe 5
 *semophantis* MEYRICK
 Hind wing not thus coloured 2
2. Ground colour distinctly orange, yellow or ochreous tinged 3
 Ground colour white, more or less irrorated with grey or fuscous 9
3. Fore wing deep orange, fasciate with whitish-yellow, hind wing whitish with about six orange bands *eteoxantha* MEYRICK
 Fore wing yellow or ochreous, hind wing not as above. 4
4. Thorax and abdomen unicolorous dark brown, the latter with narrow bands; frons of head with a strong projecting cone. *eulasys*, spec. nov.
 Thorax and abdomen blackish-grey and yellow, yellow or white, sometimes irrorated with darker colour 5
5. Thorax blackish-grey, posterior half ochreous-yellow with two blackish-grey dorsal spots; abdomen blackish-grey, three basal segments mixed ochreous-yellow, anal tuft ochreous-whitish *eurynephela* MEYRICK
 Thorax and abdomen not thus. 6
6. Thorax bright ochreous-yellow or orange-ochreous, banded or slightly irrorated with brown 7
 Thorax yellowish-white, densely irrorated with dark grey; fore wing with four brown fasciae, first of these antemedian *brachyphimus* HERING
 Thorax white or whitish, irrorated with grey 8
7. Thorax bright ochreous-yellow, a transverse band of dark brown irroration at $\frac{2}{3}$, tegula with a dark brown dot on middle of base *xanthozona* spec. nov.
 Thorax bright orange-yellow, irrorated with brown *micrographa* spec. nov.
8. Abdomen ochreous-whitish, irrorated with dark grey; fore wing with first segment whitish-ochreous suffused with grey, seven fine white bars.
 *microdesma* MEYRICK

- Abdomen whitish irrorated dark grey, two basal segments suffused with orange-fulvous, preapical segment ochreous-orange, anal segment ochreous-white; fore wing with costal edge white, some eight grey transverse marks
- *baliochlora* MEYRICK
9. Head, thorax, abdomen white, abdomen with a dark fuscous median dorsal spot *ochraspis* MEYRICK
- Head, thorax, and abdomen either not white, or white, more or less irrorated with grey 10
10. Abdomen suffused with ochreous-yellowish, more or less irrorated with fuscous, segmental margins white. 11
- Abdomen yellow; fore wing white, with suffused, pale ochreous-yellow, not dark-edged, fasciae *hofmanni* PAGENSTECHE
- Abdomen white, irrorated with fuscous 12
11. Fore wing, first lobe: three lines across the basal fifth, and four broad dark grey fasciae from beyond $\frac{1}{4}$ to before apex. *niphadosema* spec. nov.
- Fore wing, first lobe: base mixed with grey, an elongate dark fuscous spot on $\frac{1}{4}$ of costa, five whitish-ochreous, dark grey-edged fasciae from before middle to apex *anticoma* MEYRICK
12. Head grey; fore wing, first lobe: dark grey irroration at base, a small spot on costa near base, four whitish-ochreous fasciae edged dark grey, first before middle, and a subapical dark grey bar *cymographa* MEYRICK
- Head white; fore wing, first lobe: three dark grey blotches on basal third of costa, apical eighth blackish, with a narrow white subapical line.
- *argyrospodia* spec. nov.

Orneodes semophantis MEYRICK, 1929 (fig. 714)

Orneodes semophantis MEYRICK, 1929, Exot. Microl., vol. 3, pp. 537—538 (♂).

Distribution: British New Guinea, Biagi, Mambare River, 5000 feet.

♂ 23 mm. Head white, vertex suffused with pale greyish, slightly mixed with dark grey. Palpus long, ascending, median segment gradually dilated towards the apex with appressed scales, terminal segment about $\frac{1}{2}$, acute; pale ochreous-whitish, median segment slightly mixed with fuscous along its basal half, and along its upper edge as far as $\frac{2}{3}$, terminal segment with a broad subapical band of a greyish-fuscous suffusion. Thorax white, posterior half, patagium, base, and apical third of the tegula, sordid light ochreous-greyish, slightly mixed with greyish-fuscous, two longitudinal sublateral blackish-fuscous spots before the apex of the thorax. Abdomen whitish, speckled with light tawny and less with fuscous, tergites 4 and 7 almost white, posterior, dark fuscous bands on segments 2—3, 5—6, and 8, segments 2—3 also with anterior bands, and broad longitudinal lateral bands; venter creamy-white. Legs creamy-white, anterior tarsus suffused, except towards the base, with dark fuscous. Fore wing with a broad costal fold almost to its middle, strongly narrowed posteriorly, covering the base of the first, and the second segments; these segments throughout, and posterior $\frac{3}{5}$ of the fourth and fifth segments, light tawny-brownish, base of the third and the fourth as far as the cleft, and the fifth, and sixth

segments, throughout, white; ill-defined whitish costal dots on the middle of the fold; a narrow outwardly oblique white line from $\frac{2}{5}$ of the costa across the first segment, from there continued across the second to the fourth segments as a little oblique broad whitish band, edged (hardly on cilia) with blackish-fuscous; a narrow marginal white streak on the costa beyond the preceding band; two very broad white bands across the first segment, somewhat before $\frac{2}{3}$, and before $\frac{4}{5}$, and a narrow outwardly concave white transverse line before the apex; space between the white bands rather suffused with dark fuscous, first segment beyond the bands to the apex, almost blackish; cilia ochreous-fuscous, opposite white marks, white, edged with blackish, beyond the last white band, blackish; second to fourth segments with a little oblique transverse whitish fascia, suffusedly edged with fuscous-blackish, posterior edge of this suffusion broader on the third segment, and extended on the fourth, so as to form a large longitudinal blackish blotch extending over the cilia, and reaching to the following fascia which is very faint, hardly paler than the ground colour, but accentuated by its blackish-fuscous edges which are suffused, broad, and form an outwardly oblique streak on the second, and a transverse suffusion on the third segment; a third narrow white fascia parallel to the edge of the wing, well before the apices of the segments, narrowly edged with dark fuscous, less so on the cilia which are whitish; segments beyond this fascia pale brownish-white, each with a fuscous apical dot, cilia ochreous-brownish, becoming darker posteriorly, whitish opposite the white fascia, on the second segment dark blackish-fuscous between the second and the third fasciae above, and somewhat paler beneath, fifth segment white, tinged pale ochreous-brownish posteriorly; blackish-fuscous scales in the cleft; spots of blackish-fuscous irroration, arranged as follows: a minute spot at $\frac{1}{3}$, a larger one at $\frac{3}{4}$, and a narrow transverse one before the apex, corresponding with the posterior edge of the third transverse fascia; tip of the fifth segment with a fuscous dot; costal cilia pale ochreous, with broad brownish blotches, at $\frac{3}{4}$, and before the sub-apical fascia; this fascia indicated only on cilia, and narrowly edged with fuscous; dorsal cilia white; sixth segment white, a dot and a longitudinal streak of light fuscous irroration at $\frac{1}{4}$, and in the middle of the dorsum, respectively; a transverse dash before $\frac{1}{3}$, a larger spot at $\frac{2}{3}$, both extending over the base of the cilia, and a small dot before the apex, black; cilia white, with an indication of two faint greyish blotches, at $\frac{2}{3}$, and beyond $\frac{2}{3}$, last one also on the costal cilia. Hind wing white, an outwardly convex row of irrorated blackish dots rather before $\frac{2}{3}$, preceded on each first to fourth segments by five minute black points, a second transverse row of small black transverse marks at $\frac{5}{6}$, preceded by a broad hardly perceptible shadowy greyish fascia, a third row of larger dots halfway between this fascia, and the apex, and the apical black dots; third and fourth segments with a dot of a blackish irroration on the base of the cleft; a large triangular patch on the bases of the segments three to five from beyond their bases,

and a larger triangular blotch before the middle of the fifth segment, this extending over the cilia; the last mentioned patches and blotches tawny-orange, paler orange-yellowish in the middle, first, mixed, and second, edged posteriorly, with brownish; a large round black dot on $\frac{2}{3}$ of the fifth segment extending to the middle of the cilia; sixth segment with the anterior half tinged pale fuscous, irrorated with dark fuscous beyond the base, at $\frac{1}{4}$, opposite the posterior edge of the second orange patch, twice at $\frac{3}{4}$, before the apex, and in the apex, respectively; cilia white, greyish opposite the grey transverse fascia, pale fulvous along the basal half of the sixth segment.

Uncus long, slender. Gnathos with moderately thickened arms. Valva gradually dilated above, cucullus small, narrowed, somewhat curved upward, top conical, a strong curved labis at the base of the valva above. Vinculum with a broad, rounded, moderately bristled base. Furca porrect, two long, slender, sinuate and narrowed blades. Aedoeagus short, very broad, slightly curved. Cornuti, a denticulate fold. (Slide no. 913 D.)

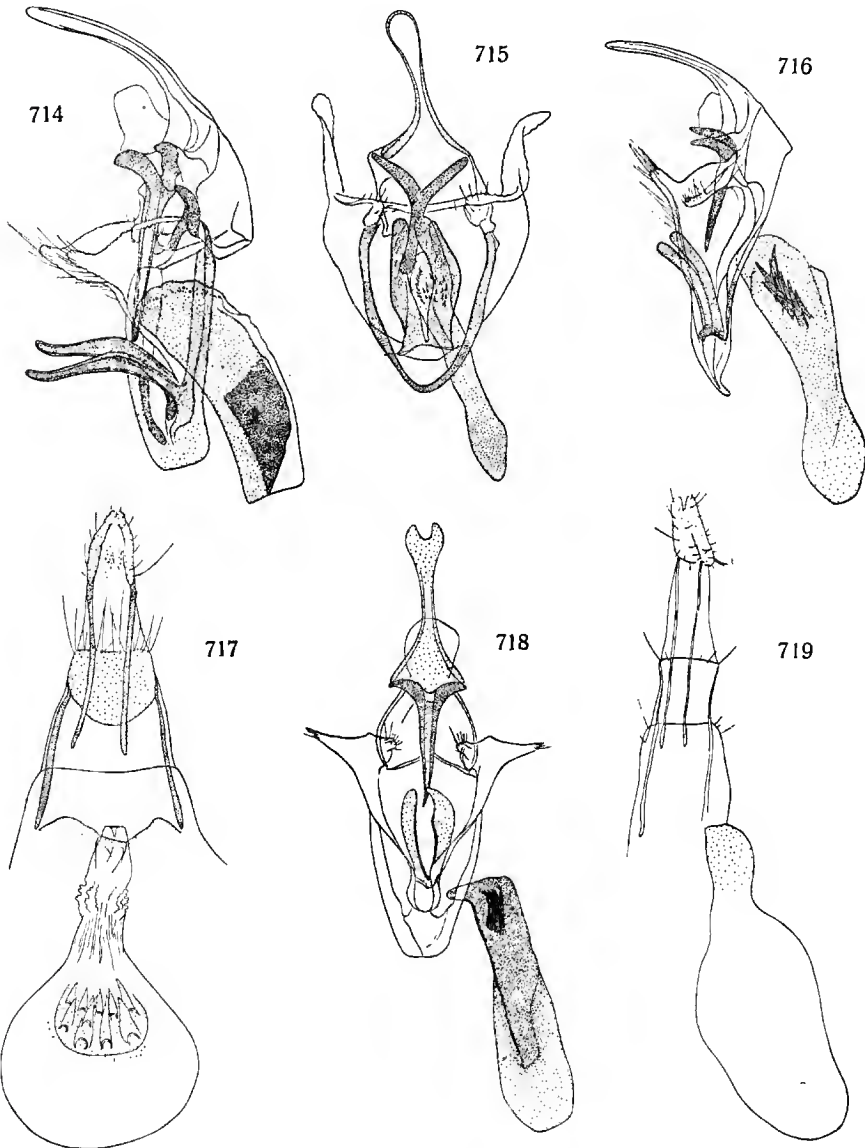
Mist Camp, 1800 m, February 11, 1939 (the redescribed specimen). Top Camp, 2100 m, January 22, 1939. Two males. A conspicuous, elegantly coloured species. MEYRICK perhaps omitted to mention the round black patch on the posterior part of the fifth segment of the hind wings.

Orneodes eudasys spec. nov. (fig. 715)

εὐδάσους = densely haired

♂ 18 mm. Head yellow, on the vertex mixed with dark brown, frons forming a strong projecting cone. Palpus moderately long, subascending, median segment with a strong projecting tuft of scales at the apex beneath, terminal segment about $\frac{1}{2}$, very slender, slightly clavate, obliquely ascending; pale yellow. Thorax dark brown, mixed with whitish-yellow. Abdomen dark brown, with narrow whitish transverse bands along the posterior edges of the tergites, genital segments and venter pale yellow. Legs pale yellow, anterior femur with the fore edge, tibia, and tarsus throughout, dark brown. Fore wing and cilia ochreous-yellow, markings blackish-brown. Base suffused with dark brown, this suffusion with its upper third occupying about $\frac{1}{5}$ of wing, its lower $\frac{2}{3}$ reaching to $\frac{1}{4}$ of the wing length; an elongate dark brown patch on $\frac{2}{5}$ of the costa not reaching the base of the first cleft, with the posterior edge strongly inwards-oblique, dorsal cilia with a blackish bar opposite each the anterior and the posterior edge of the patch; an elongate patch on the fifth and the sixth segments, just beyond the base of the fifth cleft, with the cilia opposite these, blackish; a transverse inwardly oblique fascia from $\frac{3}{5}$ of the costa, attenuated by black cilia; this fascia broad on the first, somewhat narrower on the second, broadest on the third segment, and reaching the base of the

third cleft, narrower again, and from beyond the cleft, on the fourth segment, on the fifth as broad as on the fourth, on the sixth, twice as narrow, and shifted basad; a subapical fascia, on the first segment narrow, at about $\frac{5}{6}$, connected with the apex by blackish cilia, on the second and the third segments very broad, on the fourth to the sixth, gradually narrowed, on the sixth also shifted basad; space between the first and the



Genitalia of *Orneodes*. Fig. 714: *semophantis* MEYRICK, male. Fig. 715: *eudasys* spec. nov., male. Fig. 716: *argyrosodia*, spec. nov., male. Fig. 717: *micrographa* spec. nov., female. Fig. 718: *xanthozona* spec. nov., male. Fig. 719: *niphadosema* spec. nov., female.

second transverse fasciae on the second to the sixth segments, irrorated with dark brown, except the broad edges of the ground colour bordering these transverse fasciae; this irroration not extending over the cilia; an apical fascia about $\frac{1}{2}$ as narrow as the second fascia, narrowly separated from the preceding by the ground colour, except on the cilia of the first and the second segments. Hind wing ochreous-yellow, paler than the fore wing; base suffused with dark brown, this colour extending beyond the base of the first cleft, and, on sixth segment, well beyond the base of the fifth cleft; two small dots: on the base of the fourth cleft, and on the sixth segment opposite this; a moderate, inwardly oblique dark brown post-median fascia, projecting basad on the third segment, hardly extending over the cilia, except on sixth segment, where it forms a large patch before the middle; a second similar fascia, parallel, broader, forming another large patch at $\frac{2}{3}$ of the sixth segment and of the cilia of the other segments only mixed with blackish; a third transverse fascia, tolerably parallel, broadest on the first segment, narrowed on the fourth, absent on the sixth, with the cilia blackish on all the segments, except the sixth; a subapical narrower fascia with black cilia on the first segment merging in the preceding fascia.

Uncus moderately long, clavate. Gnathos rather weak, Y-shaped. Transtilla present, a strong transverse rod. Valva dilated above, cucullus moderate, rising, flattened, its basal knob hardly developed. Vinculum with base moderate, slender, ovate. Furca, two broad, arched blades, with rounded tops. Aedocagus slender, base dilated. Cornuti, several longitudinal series of short teeth. Coremata of the seventh abdominal segment strongly developed. (Slide no. 915 D, type.)

Iebèlè Camp, 2250 m, November 20, 1938. One specimen.

***Orneodes xanthozona* spec. nov. (fig. 718)**

$\xi\alpha\nu\theta\acute{o}\varsigma$ = yellow, $\zeta\acute{\omega}\nu\eta$ = belt

♂ 19 mm. Head pale whitish-ochreous, vertex somewhat brighter, slightly mixed with brownish; scape of the antenna with a narrow brown apical ring. Palpus long, ascending, moderately curved; whitish-ochreous tinged pale yellowish, basal segment dark brown except its apex, median segment moderately dilated with appressed scales, with a small longitudinal streak of a dark brown irroration in the middle, terminal segment under 3, with a subapical ring of a dark brown irroration. Thorax bright ochreous-yellow, a broad transverse band of dark brown irroration at $\frac{2}{3}$, tegula bright yellow, a small dark brown dot on the middle of the base, posterior $\frac{2}{3}$ greyish-white, apical halves of the scales dark brown. Abdomen bright orange-yellow, markings dark brown; first tergite with a pair of lateral, and a moderate median spot, second and third tergites dark brown, except a narrow pale posterior marginal line; tergites 5—6—7

strongly irrorated with dark brown except towards their edges, each with a semilunar transverse white spot on the middle of the posterior edge; eighth tergite with a moderate transverse spot in the middle of its anterior edge; uncus slightly mixed with brownish; venter yellowish-whitish. Legs whitish tinged pale fuscous, anterior yellowish with the femur and the tibia dark brown in the middle above. Fore wing deep yellow-ochreous, markings dark brownish-fuscous: a narrow costal fold to beyond the base of the first cleft, marked as follows: costal edge narrowly dark fuscous, with three broad, transverse bands, at $\frac{1}{3}$, beyond the middle, and before the apex of the fold, first dilated below, posterior lower angle of the first and the second bands connected by a narrow streak of a fuscous suffusion with a marginal streak of a dark fuscous irroration, along the dorsum of the first, and the second segments: third transverse band continued as a broad transverse fascia across $\frac{1}{3}$ of the wing, formed by coarse fuscous irroration and edged with dark fuscous, outwardly oblique, dilated across the first, and the second segments, enclosing the base of the first cleft, broad, slightly shifted basad across the third, and the fourth segments, enclosing the base of the third cleft, twice as narrow, and indicated only by its dark edges, on the fifth and the sixth segments: an irregular irroration on the base of the wing extended posteriorly between the second, and the sixth cleft, on the sixth segment hardly extended beyond the base of cleft, a small dot halfway toward this, and first transverse fascia; a second transverse fascia about as broad as the preceding, from before the middle of the costa (on the first lobe with outwardly oblique edges), strongly outwards-curved on the second, and the third segments, narrowed to a point on the fourth, moderately broad and median on the fifth segment, absent on the sixth: a third transverse fascia, from $\frac{2}{3}$ of the costa, on the first segment somewhat narrower than the preceding, with its anterior edge inwardly oblique, posterior almost vertical, on the second and the third segments strongly curved outwardly and dilated, less so on the third segment, on the fourth to the sixth strongly curved basad, moderately broad, paler, with dark edges; fourth transverse fascia from $\frac{3}{4}$ of the costa, parallel and somewhat narrower than the preceding, indicated only by dark edges on the fourth to the sixth segments, on the first segment a patch halfway between the third and the fourth fasciae; a narrow subapical fascia and a row of apical dots, confluent on the first segment; cilia light ochreous-yellow, blackish-fuscous opposite dark markings, on the dorsum of the fourth to the sixth segments, pale grey. Hind wing light ochreous-yellow, markings formed by patches of dark fuscous dense irroration, together indicating rather narrow transverse fasciae: a fascia from beyond $\frac{1}{5}$, and another from the middle of the costa, converging in a single dot at $\frac{1}{3}$ of the fifth segment, two additional dots between these series, on the first segment touching the second fascia, on the second segment halfway between these fasciae; two more transverse series of blotches, inwardly oblique, and converging in a broad

double dot on the third segment, and in a single dot on the fifth segment, opposite this double dot; black blotches between these series, and a series of minute apical dots, arranged as follows: an approximated dot on the first segment, three equidistant dots on the second, four unequal ones on the third, five on the fourth, two anterior of which are the largest, four on the fifth segment, of which the first and the ultimate are the largest; sixth segment with three elongate equidistant blotches, first of these at about $\frac{5}{6}$, no apical dot. Cilia concolorous, irregularly and moderately mixed with greyish opposite the dark markings.

Tegumen rounded. Uncus moderately long, top clavate, bifid. Gnathos moderately long, strong, arms thickened, top acute. Valva narrow, cucullus small, pointed, top with a few bristles, basal knob strong. Vinculum rather elongate, with a dilated, and truncate base. Furca moderate, with broad blades, with their points narrow, curved downward. Aedoeagus moderate, elongate, its base vesicular. Cornuti, a sheaf of short spines. (Slide no. 916 D, type.)

Iebèlè Camp, 2250 m, November 17, 1938. One specimen.

Orneodes micrographa spec. nov. (fig. 717)

μικρός = small, *γράφω* = to draw

♀ 20 mm. Head and palpus pale whitish-yellow, vertex brighter yellow. Palpus moderately long, ascending, median segment gradually dilated with appressed scales, terminal segment $2\frac{1}{2}$; yellowish-white, median segment with a subapical transverse shadow, terminal slightly mixed with greyish towards the apex. Thorax bright orange-yellow, irrorated with brown. Abdomen pale ochreous, irregularly suffused with yellowish-orange, more so towards the sides, and the apex, venter greyish, except the anal tuft. Legs ochreous-whitish, anterior tibia infuscated above. Fore wing and cilia pale yellowish-ochreous, towards the base, and with the first and the second segments throughout, suffused with brighter ochreous-yellow. First and second segments with two ill-defined broad transverse bands of a fuscous irroration, beyond the base and beyond $\frac{1}{5}$, dorsal cilia dark fuscous opposite these; first segment with two more broad bands of a rather dark greyish-fuscous irroration, edged with dark fuscous, at, and beyond the middle, dorsal cilia opposite these dark fuscous; beyond these marks only a sparse fuscous irroration along the dorsal half of the segment to its apex, dorsal cilia fuscous, an indication of a narrow transverse streak at $\frac{3}{4}$; second segment with four very broad bands, indicated only by a pale fuscous suffusion, but distinct by their dark fuscous edges, and by the dark fuscous cilia above and beneath, opposite these bands; a subapical dark fuscous transverse dot, accentuated by dark fuscous bars in the cilia above and beneath, and a minute fuscous ill-defined point in the apical

cilia; the third to the sixth segments, with the same bands only indicated by dark edges and greyish-fuscous coloured cilia between these edges, so that each segment appears to bear a series of fuscous transverse inequally spaced dots, connected in pairs by dark costal and dorsal cilia as follows: third segment with the first dot at $\frac{1}{4}$, connected by dark cilia with the second, well beyond this, the third, and the fourth dots remote, connected by dark cilia; the fifth, and the sixth, much more approximated, connected, at $\frac{3}{4}$; finally, the seventh, and the eighth still more approximated, at about $\frac{7}{8}$; fifth segment with eight transverse marks, gradually becoming more approximated posteriorly, first at $\frac{1}{4}$ of the wing, last mark subapical; cilia dark between the first and the second marks (indistinct), between the fourth, and the fifth, between the sixth, and the seventh, and beyond the eighth to before the apex; fifth lobe with nine dots, first rather before $\frac{1}{4}$ of the wing, all pairs, i.e. the first and the second, the third and the fourth, etc., with dark cilia between them, subapical dot separate; not cleft base of wing with an oblique narrowed blotch of a fuscous irroration, its base occupying the dorsum from beyond the base of the wing, to halfway the base of the last cleft, its top obliquely ascending over, and beyond, the base of the second cleft. Hind wing and cilia, pale ochreous-yellow, with four slightly undulating brighter yellow broad transverse fasciae, accentuated by dark fuscous transverse irrorated marks, representing their edges; cilia between these marks blackish-fuscous, costal darker than dorsal; each segment with a subapical dark fuscous dot, tip and apical cilia also dark fuscous.

Ovipositor lobes pointed, moderately sclerotized. Posterior edge of the ninth and the eighth segments with long fine bristles and dense bristle-scales, respectively. Ostium small. Limen, a weak transverse plate, with the upper edge broadly incised in the middle. Ductus bursae short, strongly plicate. Bursa copulatrix denticulate. Signum, a round plate near to opening of the bursa, bearing huge prostrate concave dentations. (Slide no. 914 D, type.)

Top Camp, 2100 m, January 25, 1939. One, rather damaged, specimen.

Orneodes niphadosema spec. nov. (fig. 719)

νφάς = snow, *σῆμα* = a mark

♀ 15 mm. Head white, vertex suffused with light fuscous. Antenna somewhat flattened dorso-ventrally, whitish, banded with light fuscous above. Palpus moderately long, curved, subascending, diverging; median segment slightly dilated towards the apex, white, dark grey laterally, terminal segment $\frac{2}{3}$, strongly flattened dorso-ventrally, white. Thorax whitish, irrorated, and coarsely dotted, with rather light fuscous, tinged greyish, dotting arranged in three ill-defined transverse bands: first band anterior, second submedian, third at $\frac{2}{3}$, each second and third tending

to form two rounded submedian dots. Abdomen whitish, suffused with deep ochreous, except the posterior edges of the segments, ochreous colour moderately irrorated laterally throughout, and on tergites 1—3, narrowly edged posteriorly, with dark fuscous; this edge on tergite 1 indent in the middle, tergite 4 with the white colour extended, tergite 5 with a dark fuscous antelateral spot at each side, tergite 6 with a small dark fuscous longitudinal mark on each side posteriorly, venter greyish-ochreous-white. Legs whitish, anterior suffused with dark grey except the articulations, and except the apex of the tarsus. Fore wing white, towards the base irrorated with light greyish-fuscous, except along the costa; first segment, with the anterior fifth with three transverse bands of a light greyish-fuscous irroration, first of these smaller, basal; beyond these, four broad dark grey bands, beyond $\frac{1}{4}$, before the middle, before $\frac{3}{4}$, and subapical, each one broader than the preceding; the apex of the first segment suffused with grey, confluent with the fourth band along the wing margins, a patch of pale fuscous suffusion between the third and the fourth bands, not reaching those; first dark grey band is continued across the wing, forming a wedge-shaped patch, with the top on the third and the fourth segments before the base of the third cleft; second segment with four broad bands, leaving narrow spaces of white ground colour between them, first band median, moderately broad, dark grey, second more than twice as broad, light greyish-fuscous, third and fourth somewhat smaller, dark grey, tip of the segment greyish; third to sixth segments with four very broad fasciae separated by moderate or narrow spaces of white ground colour the first of these fasciae median, dark grey, very broad on the third segment, on the second and the fourth segments twice as narrow, on the fifth narrowest, on the sixth segment dilated again; the second fascia rather light fuscous, very broad on all the segments, outwardly curved, on the third and the sixth segments projecting posteriorly; the third fascia narrower, outwardly curved, dark grey; the fourth fascia twice as narrow, parallel, subapical, dark grey. Cilia white, opposite markings dark grey on the first segment, mixed and suffused with greyish on the other segments. Hind wing white, crossed by five moderately broad, undulating fasciae of a light fuscous irroration, which form minute transverse lines across each segment, edged with dark fuscous, sometimes only these edges distinct, the first and the ultimate fasciae dark fuscous, rather narrow, at $\frac{1}{5}$, and before the apex, respectively; the tips of the segments, grey. Cilia sordid pale ochreous-white, slightly tinged greyish opposite the markings.

Ovipositor small, weak. Ostium and ductus bursae not modified. Bursa copulatrix moderate, simple. (Slide no. 918 D, holotype.)

Moss Forest Camp, five km northeast of Lake Habbema, 2200 m, October 27, 1938. Two specimens. Nearest to *O. semophanthis* MEYRICK.

Orneodes argyrosodia spec. nov. (fig. 716)

ἀργυρος = silver, *σποδιά* = ashes

♂ 19 mm. Head white. Palpus moderately long, ascending, white, median segment suffused with black towards the base, terminal segment $2\frac{1}{2}$, subobtuse, slightly flattened dorso-ventrally, faintly tinged greyish. Thorax with the anterior half white, posterior fuscous-grey, two white transverse bands, at $\frac{2}{3}$, and in the apex, respectively, tegula white, its apical half fuscous-grey. Abdomen white, strongly irrorated with blackish-fuscous, this irroration more or less confluent, so as to form transverse bands along the anterior edges of the tergites, dilated posteriorly towards the sides; venter white. Legs white, tinged pale ochreous. Fore wing white, faintly touched with greyish, first and second segments beyond the base of the cleft, suffused with pale fuscous-greyish; with three elongate dark fuscous-grey blotches, first one basal, occupying less than $\frac{1}{3}$ of the costa, becoming shorter posteriorly, the lower edges of these blotches more or less interconnected by a slight irroration of the same colour; first segment with the apical eighth blackish, with a narrow transverse white subapical line, cilia with three broad grey blotches, beyond the base of the cleft, halfway to the apex, and in the apex, respectively. Second segment from the base of the cleft, with five bands of grey suffusion, edged with blackish, accentuated by blackish cilia; the first of these moderately broad, the second much broader, the third, and the fourth each smaller than the preceding, the fifth narrow, subapical; third segment with six bands, the first very broad, subbasal, other corresponding with those of the preceding segment, but each one smaller, respectively, except the third band which is as broad as the second band of the second segment; dorsal cilia blotched opposite bands with pale greyish; fourth and fifth segments each with five bands only the edges of which are distinct, forming seven transverse dark marks (the anterior edge of the first band being obliterate), and a subapical dot; cilia white; sixth segment with four bands: three broad, greyish, dark edged ones, at $\frac{1}{4}$, at $\frac{2}{3}$, and beyond $\frac{2}{3}$ respectively, and a narrow blackish band, subapical; cilia white, blackish opposite the markings. Hind wing white, with four tolerably equidistant moderate blackish transverse bands, most of which, except of the first segment, are reduced each to a pair of transverse blackish marks, representing their edges; first of these at $\frac{1}{4}$, ultimate at $\frac{4}{5}$, and two rows of black dots, first row at $\frac{1}{6}$, with minute dots, second row subapical, with larger dots, the dot on the first segment dilated, so as to form a broad patch; cilia white, opposite markings slightly mixed with blackish, costal cilia of the first segment with broad greyish bars.

Uncus long, slender. Gnathos rather short, strong, arms curved. Valva rather broad, dilated above, cucullus a small, subascending projection, with an elongate basal knob. Vinculum with a pointed base. Furca long,

blades slender, not dilated, slightly arched downward, with rounded tops. Aedoeagus large, narrowed towards the base which is dilated, and bulbate. Cornuti, a patch of thick spines. (Slide no. 917 D, holotype.)

Iebèlè Camp, 2250 m, November 17, 1938. Two specimens.

AEGERIIDAE

Key to the Papuan genera of the Aegeriidae¹⁾

1. Antenna pointed, without apical tuft of cilia 2
 Antenna clavate, ending in a minute tuft of cilia 4
2. Hind wing with veins 3 and 4 stalked *Micrecia* HAMPSON
 Hind wing with veins 3 and 4 remote 3
3. Fore wing with veins 7 and 8 separate *Tinthia* WALKER
 Fore wing with veins 7, 8 and 9 stalked *Callithia* LE CERF
4. Hind wing with veins 3 and 4 connate or stalked 5
 Hind wing with veins 3 and 4 separate 7
5. Fore wing with veins 4 and 5 curved downwards 6
 Fore wing with veins 4 and 5 not curved downwards . . . *Conopia* HÜBNER
6. Fore wing with vein 9 out of the stalk of 7 and 8 *Aegerosphacia* LE CERF
 Fore wing with vein 9 separate *Trilochana* MOORE
7. Fore wing with veins 7 and 8 coincident *Melanosphacia* LE CERF
 Fore wing with veins 7 and 8 stalked 8
8. Fore wing with vein 3 nearer to 2 than to 4; hind legs with extremely dense tufts throughout *Melittia* HÜBNER
 Fore wing with vein 3 nearer to 4 than to 2; hind legs normally sealed . . .
 *Paranthrene* HÜBNER

Trilochana MOORE, 1879

Trilochana MOORE, 1879, Deser. Lep. Atkins., p. 9. HAMPSON, Fauna Brit. Ind., Moths, vol. 1, pp. 187, 190, 1893. Novit. Zool., vol. 26, pp. 49, 83, 1919. Proc. Ent. Soc. Lond., 1920, p. 84, 1921. LE CERF in OBERTHÜR, Etud. Léop. comp., vol. 14, pp. 272—273, 1917. DALLA TORRE & STRAND, Lepid. Catal., part 31, p. 136, 1925. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 231, 1929. GAEDE in SEITZ, Gross-Schmett., Indo-Austr., vol. 10, p. 787, 1933.

Scotiomima BUTLER, 1885, Trans. Ent. Soc. Lond., 1885, p. 371.

Trilochana smaragdina spec. nov.

♀ 41 mm. Head black, face (rubbed) presumably mixed with white, orbits broadly edged with silvery-white. Antenna black, unipectinate along their lower two-thirds, pectinations 1¹/₂, each pectination minutely ciliate at the apex. Palpus black, slightly mixed with white. Thorax (denuded) violet-black with a purple and bluish shine, pectus fuscous-bronze, with a prismatic gloss. Abdomen purple-black, venter greyish-bronze; no anal tufts of hairs, possibly due to rubbing. Legs (much denuded) black, without long hairs (possibly due to rubbing). Fore wing

¹⁾ Partially adopted from HAMPSON.

(damaged) brilliant golden-green, mixed with emerald-green; a broad streak along the costal margin, a narrower streak along the dorsum, and apparently the apical fifth of the wing, suffused with black, with a faint purple gloss; base of the wing with rough black scales; beyond these a moderate elongate hyaline patch below the cell, not reaching vein 1b. Cilia ? (lacking). Hind wing brilliant emerald-green, along the terminal edge in the tornus, and in the middle of the disc from below the cell to the margin, becoming brilliant golden-green; three elongate hyaline patches beyond the base, pointed anteriorly, rounded posteriorly: in the cell, below the cell as far as vein 1c, and between 1b and 1a, respectively, the upper patch more shifted distad. Cilia (damaged), black.

Bernhard Camp B, 100 m, April 12, 1938. One, damaged, specimen. Nearest to *T. triscoliopsis* ROTHSCHILD, from the Philippine Islands, but much smaller, and differing in colour, especially in that of the abdomen, and of the legs.

Melittia HÜBNER, 1820

Melittia HÜBNER, 1820, Verz. bek. Schmett., p. 128. WALKER, List Lep. Het. Brit. Mus., vol. 8, p. 66, 1856. BOISDUVAL, Hist. Nat. Léop. Hét., vol. 1, p. 468, 1875. HAMPSON, Fauna Brit. India, Moths, vol. 1, p. 188, 202, 1892. SWINHOE, Catal. Lep. Het. Mus. Oxf., vol. 1, p. 37, 1892. DUDGEON, Journ. Bomb. Nat. Hist. Soc., vol. 12, p. 41, 1898. BEUTENMULLER, Mem. Mus. Nat. Hist., vol. 1, part 6, pp. 231–232, fig. 8, 1901. DYAR, U.S. Nat. Mus. Bull. No. 52, p. 364, 1902. HOLLAND, Moth Book, p. 380, 1903; *idem*, 1920: BARTEL in SEITZ, Gross-Schmett., Pal., vol. 2, p. 379, 1912. HAMPSON, Novit. Zool., vol. 26, pp. 50, 84, 1919. DALLA TORRE & STRAND, Lepid. Catal., part 31, p. 137, 1925. FLETCHER, Mem. Agric. Ind., Ent., vol. 11, p. 136, 1929. GAEDE in SEITZ, Gross-Schmett., Indo-Austral., vol. 10, p. 788, 1933.

Key to the Papuan species of *Melittia*

1. Posterior leg transversely banded with orange *gigantea tigripes* subsp. nov.
Posterior leg laterally not banded with orange 2
2. Posterior tibia mixed with deep crimson and white above
. *amboinensis erythrina* subsp. nov.
Posterior tibia mixed with yellow and white above
. *nepcha xanthodes* subsp. nov.

Melittia gigantea MOORE, 1879

Melittia gigantea MOORE, 1879, Proc. Zool. Soc. Lond., 1879, p. 413. WATERHOUSE, Aid. Ident. Ins., vol. 2, pl. 131, fig. 4, 1883. COTES & SWINHOE, Catal. Moths India, vol. 2, p. 42, 1887. HAMPSON, Fauna Brit. India, Moths, vol. 1, p. 204, 1892. Novit. Zool., vol. 26, p. 90, 1919. LE CERF in OBERTHÜR, Etud. Léop. comp., vol. 14, p. 175 ♀, 1917. DALLA TORRE & STRAND, Lepid. Catal., part 31, p. 144, 1925. GAEDE in SEITZ, Gross-Schmett., Indo-Austr., vol. 10, p. 790, pl. 95, series f, 1933.

Melittia hamerosa SWINHOE, 1892, Catal. Lep. Het. Mus. Oxf., vol. 1, p. 38. HAMPSON, Novit. Zool., vol. 26, p. 90, 1919. DALLA TORRE & STRAND, Lepid. Catal., part 31, p. 144, 1925.

Distribution: Punjab, Central China, Korea, Japan.

Melittia gigantea tigripes subspec. nov.

♀ 35 mm. Head brownish-black, collar yellow, becoming paler below. Antenna black. Palpus amber-yellow, basal segment with a broad black band occupying its posterior half, median segment except its base, and terminal, except its tip, mixed with black. (Thorax and abdomen much denuded, presumably black, abdominal bands not perceptible.) Venter black. Legs black; median leg with the femur orange-yellow, tibia with an orange patch at the middle above and at the apex, tarsus yellow, mixed with reddish-orange, above also densely irrorated with black; posterior leg with the femur mixed with yellow above, and towards the apex below, tibia above yellow suffused with reddish-orange, more so posteriorly, laterally with two bands of pale yellow irroration, before and beyond the middle, respectively, and a deep orange oblique apical band, black colour projecting between these bands on the orange-yellow hairs on the dorsum, so as to form large, triangular patches; posterior tibia below sparsely mixed with orange hairs from the base to below the first band, more densely so below the second band; posterior tarsus with an inwardly oblique deep orange band, posterior half of the tarsus laterally mixed with pale yellow, this colour not extending over the hair-tufts. Fore wing yellowish-hyaline, more distinctly tinged yellowish before the discoidal vein, margins with moderate deep brown streaks, mixed with a few fulvous scales, on the costa this streak extended as far as the cell; veins narrowly streaked with dark brown, vein 2 streaked broader; discoidal fasaia broad, inwardly oblique, dilated below, but hardly reaching the lower angle of the cell; its anterior edge projecting, and continued as a narrow streak along the anterior part of the median branch in the cell; this fasaia deep brown, mixed with fulvous. Cilia dark fuscous. Hind wing yellowish-hyaline, margin and cells narrowly dark brown, cilia dark fuscous.

Hollandia, sea level, July, 1938. One specimen. Differs from the nominate form by the darker costa in the fore wing, and by the differently coloured posterior legs.

Melittia amboinensis FELDER, 1861

Melittia amboinensis FELDER, 1861, Sitz. Ber. Akad. Wien, vol. 43, p. 28. WALKER, List Lepid. Heter. Brit. Mus., vol. 31, suppl. 1, p. 16, 1864. SWINHOE, Catal. Lep. Het. Mus. Oxf., vol. 1, p. 37, 1892. LE CERF *in* OBERTHÜR, Etud. Léop. comp., vol. 14, p. 192, etc., 1917. HAMPSON, Novit. Zool., vol. 26, p. 87, 1919. DALLA TORRE & STRAND, Lepid. Catal., part 31, pp. 137–138, 1925. GAEDE *in* SEITZ, Gross-Schmett., Indo-Austr., vol. 10, p. 789, pl. 51, figs., 1933.

Distribution: Sikkim, Assam, Madras, Burma, Malaya, Sumatra, Borneo, Java, Bali, Lombok, Celebes, Sangir, Sula, Amboina, Ceram, British New Guinea, Trobriand Islands, Queensland.

Melittia amboinensis erythrina subspec. nov.

ἐρυθρῶς = blood-coloured

♂ 43 mm. Head, antenna, black, vertex mixed with a few white hairs, face bronze, orbits below, white. Palpus black, laterally densely mixed with white. Thorax dark fuscous, mixed with olive and a few purple-whitish scales, shoulder with a small white patch, meso and metathorax with large fuscous-amber-yellow tufts; pectus bronze-white. Abdomen black with narrow yellow bands on the posterior edges of the segments, dilated laterally, anal tuft mixed with pale yellow, venter whitish. Legs black, mixed with white; anterior femur with a white basal half, tibia fringed with white below, tarsus with narrow dorsal, and lateral, yellowish streaks; median femur white above and below, tibia along the anterior half laterally, mixed with whitish-green-metallic scales, a tuft of white hairs beyond the middle below, edged above with pale blue scales, tarsus faintly ringed with white; posterior femur white above and below, a broad snow-white pencil of hairs covering its basal half; posterior tibia laterally (externally) with two transverse fasciae of a white irroration, with pale green gloss, before and beyond the middle, respectively, above internally mixed with pale fulvous-pink, this colour extending over the dorsum of the tibia posteriorly and becoming dark fulvous, inwardly in the middle also mixed with very long white hairs, and towards the base, with sordid olive-ochreous ones; posterior tarsus black, with a moderate yellowish-white tuft at its base laterally. Fore wing black, hyaline areas hardly tinged yellowish, extended, postcellular area enclosing almost the half of the furcation of the veins 7 and 8; a few white scales on the apical band; a small elongate yellow spot on the middle of the base of the wing. Cilia dark fuscous. Hind wing white-hyaline, with the margin, and the veins black; dorsal lobe black, its marginal half and the basal tuft of hairs, yellow. Cilia dark fuscous.

Araucaria Camp, 800 m, March 28, 1939. One specimen. Sufficiently distinct by the deep pink-fulvous hairing of the hind legs.

Melittia nepcha BUTLER, 1876

Melittia nepcha BUTLER, 1876, Trans. Zool. Soc. Lond., vol. 9, p. 635. Deser. Lep. Atkins., p. 10, 1879. COTES & SWINHOE, Catal. Moths India, vol. 2, p. 42, 1887. LE CERF *in* OBERTHÜR, Etud. Lép. comp., vol. 14, pp. 204, 231, 1917. Novit. Zool., vol. 26, p. 87, 1919. DALLA TORRE & STRAND, Lepid. Catal., part 31, p. 146, 1925. GAEDE *in* SEITZ, Gross-Schmett., Indo-Austr., vol. 10, p. 789, 1933.

Melittia nepcha, HAMPSON, Fauna Brit. Ind., Moths, vol. 1, p. 205, 1892. (lapsus)

Distribution: Sikkim, Nilgiris, Rangoon, Pegu, Tenasserim, Perak.

Melittia nepcha xanthodes subspec. nov.*ξανθοδής* = yellowish

♂ 30 mm. Head brownish-black, face paler brownish, orbits below, white. Antenna black, apical third fulvous, laterally mixed with pale yellow scales. Palpus white, basal segment with several black setae, median with a strong sublateral ridge of black setae externally, internally fuscous, terminal segment blackish beyond the base. Thorax dark brown mixed with deep brownish-ochreous scales, patagia with blue iridescence, apex of the tegula with a brownish-ochreous tuft; pectus bronze-fuscous, mixed with white; lateral tufts of the metathorax deep brownish-ochreous. Abdomen dark brown, with narrow orange-ochreous bands on the posterior margins of the segments, these bands on the anterior segments considerably dilated laterally; venter white, becoming yellowish towards the apex, two orange-yellow narrow rings on the anal ventrites. Legs blackish-brown, partially with a bronze gloss; anterior femur with a broad attenuated white ventral streak, tibia white below, tarsus pale yellow above; median femur white above, and below, tibia mixed with white in the middle below, and with a median whitish band, in middle also mixed with a few blue-metallic scales, tarsus with the base mixed with white; posterior leg, femur with white knee, also white below, tibia mixed with deep ochreous-fulvous above, above internally also with long white hairs along its median third, mixed with white externally, in the middle, at the apex, and below the middle. Fore wing fuscous-black with a bronze gloss, apical area and terminal band tawny-fuscous, transverse band on the end of the cell rather broad, dull black; hyaline areas faintly tinged yellowish, extended as follows: a broad elongate-triangular patch in the cell, a broad streak below the cell, postcellular area large, enclosing somewhat less than the half of the fureate parts of the veins 7 and 8; a few blue scales on the transverse band. Cilia tawny-fuscous. Hind wing hyaline, except the dorsal lobe, less tinged yellowish than the fore wing, margin, and veins narrowly fuscous-black; dorsal lobe black, with a marginal streak, and a basal tuft of hairs, yellow. Cilia fuscous-black.

Hollandia, sea level, July 25, 1938. One specimen. Differs from the nominate form chiefly by the dark brown body, and by the more extended yellow scaling and hairs, and by fulvous hairs on the dorsum of the hind tibia.

Paranthrene HÜBNER, 1820

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Sciapterum BARTEL, 1912, in SEITZ, Gross-Schm., Pal., vol. 2, p. 376 (*Sciapteron emend.*)

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Key to the Papuan species of *Paranthrene*

1. Transparent parts of fore wing brassy-golden, with a rosy gloss
 *scintillans* BUTLER
 Transparent parts of fore wing hyaline, tinged yellowish or bluish, or colourless
 2
2. Hyaline patch in cell with bluish gloss *charlesi* LE CERF
 Hyaline patches without bluish gloss or tinge 3
3. Costa and dorsum steel-blue, transverse band and apical fifth of wing purple
 *dohertyi* ROTHSCHILD
 Not thus 4
4. Postcellular hyaline area rounded, or the entire wing except its margin, and
 veins, hyaline 5
 Postcellular hyaline area triangular 6
5. Hyaline parts white *flavifrons* HAMPSON
 Hyaline parts yellowish. *pentazonata* HAMPSON
6. Opaque areas brownish-yellow. *hyalochrysa* spec. nov.
 Opaque areas blackish-brown, or purple-black 7
7. Postcellular hyaline patch extends from vein 3 to 6. *leucocera* HAMPSON
 Postcellular hyaline patch from vein 3 to 4 or above 4 but not reaching vein
 5. 8
8. Hyaline patch between veins 3 and 4 *microthyris* HAMPSON
 Hyaline patch terminated below by vein 3, reaching posteriorly above vein 4
 *cyanopsis* DURRANT

Paranthrene hyalochrysa spec. nov.

$\bar{\sigma}$ αλος = transparent, χρυσός = gold

♀ 48 mm. Head brownish-black, with a few yellow hairs, collar yellowish on the vertex, white around the eyes, face yellowish-white, around the margins suffused with yellow, orbits white. Antenna black, scape mixed

with yellow. Palpus brown-black, with very long fringe of scales below, dorsum with a bright yellow streak, narrow on the median, broad, attenuated, on the terminal segment. Thorax (denuded) blackish-brown, with a few yellow scales, indications of a median, and of an apical yellow transverse band, patagium metallic bluish-violet. Abdomen purplish-black; bright yellow markings, a rather broad streak along the posterior edge of the second segment laterally, a narrow ring along the posterior edge of the fourth segment, and a lateral spot on the seventh segment; anal tuft mixed with orange; venter with a yellow spot on the second and the third ventrites, a broad band on the fourth, a narrow one on the fifth longitudinal median orange patch on the anal ventrites. Legs brownish-black; anterior femur and tibia with a long black fringe below, femur yellow internally, externally with a broad orange streak from beyond the base of the tibia, to the tip of the tarsus; median leg, coxa yellow, tibia with the basal half and a tuft at the apex, orange, tarsus orange above; posterior leg, coxa broadly yellow, tibia with a broad yellow median band and an orange apical band, tarsus orange above. Fore wing with the costa as far as the upper edge of the cell, dark fuscous, this colour extending beyond the cell as a narrow marginal streak to before the apex; some orange scales below the costa anteriorly; a narrow yellowish line along the posterior half of the vein 12; dorsal margin with a rather narrow fuscous streak, dilated anteriorly, so as to occupy the space below vein 1b; a blackish-fuscous patch of roughish hair-scales on the base of the wing; semitransparent deep orange scaling below the cell from its base to the origin of vein 2, and in the posterior half of the cell; space between the costa, and vein 5, and below this vein from its basal third to the lower angle of the cell, orange-yellowish, densely and evenly suffused with fuscous, less densely suffused between veins 7 and 9; termen from vein 5 to the tornus, with a narrow fuscous, mixed with yellowish, marginal line, slightly dilated above; all veins dark fuscous; a cloudy moderate fuscous band along the closing vein; hyaline areas (viz. anterior half of the costa from beyond the basal, and the tornal patches, as indicated), yellowish. Cilia pale fuscous, mixed with fulvous. Hind wing yellowish-hyaline, all veins and margin, narrowly dark fuscous. Cilia light fuscous-purple.

Araucaria Camp, 800 m, March 21, 1938. One specimen. Possibly nearest to *P. pentazonata* HAMPSON.



Verhandelingen, uitgegeven gedurende het lopende jaar en een aantal daaraan voorafgaande jaren:

(Transactions published during the last few years inclusive of the current year)

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*) Out of print.

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Tweede Reeks, Deel L (1951—)

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